RICOH

# RICOH PJ X3351N/WX3351N/ X4241N/WX4241N

# Operating Instructions


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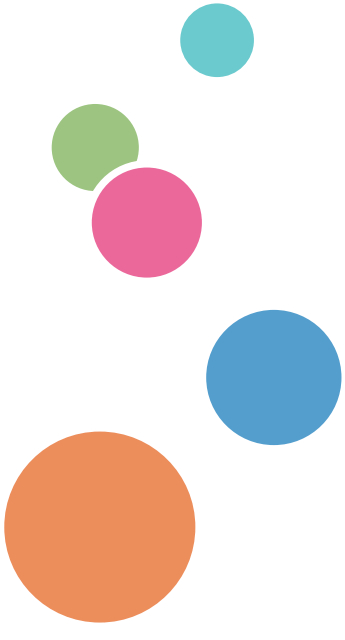
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For safe and correct use, be sure to read the Safety Information in Read This First before using the machine.

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# Introduction

## Copyrights to Images

When projecting images using the projector, be careful not to infringe the copyright of protected materials.

The following are examples that may infringe the copyright of protected materials.

- Broadcasting images or movies for commercial purposes
- Modifying images or movies using functions such as freeze, magnify, or zoom to broadcast images for commercial purposes or public viewing
- Varying the aspect ratio of images or movies using a function that changes the screen size to broadcast images for commercial purposes or public viewing

## Important

In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.

The manufacturer shall not be responsible for any damage or expense that might result from the use of parts other than genuine parts from the manufacturer with your office products.

## Notes to Users Viewing 3D Images

Pay attention to the following points when viewing images using 3D glasses with the projector:

- You need 3D glasses to view 3D images. The projector uses DLP Link technology to synchronize with 3D glasses. You need to use the optional 3D glasses that support DLP Link (RICOH PJ 3D Glasses Type 2).
- How 3D images are viewed may vary according to the individual.
- Do not use 3D glasses for viewing any material other than 3D images.
- Before viewing 3D images, make sure to read the manuals provided with your 3D glasses and 3D compatible content.
- Avoid viewing 3D images for a long period of time. Take a break of 15 minutes or longer after every hour of viewing.
- If you feel sick while viewing 3D images, stop viewing them. If you continue to feel sick, consult a doctor.

- When viewing 3D images in a room where an LED lighting system or fluorescent lights are used, you may feel that the light in the room flickers. If this is the case, dim the lights until you do not notice any flickers, or turn off the lights.
- If you or any member of your family has a history of light-sensitive seizures, consult a doctor before viewing 3D images.
- To view 3D images, sit in front of the screen so that your eyes are parallel and level with the screen.
- Viewing 3D images from a place that is too close to the screen may result in eye strain. The distance between the screen and you should be at least three times the height of the screen.
- Adult supervision is required for children using 3D glasses.
- Viewing 3D images is not recommended for children under 6 years old. It may negatively affect development of their vision. Consult a doctor before using 3D glasses.

# Manuals Provided with the Projector

Read this manual carefully before you use the projector.

Refer to the manuals that are relevant to what you want to do with the projector.

**Important**

- **The manuals are provided in various formats.**
- **Adobe® Acrobat® Reader®/Adobe Reader must be installed in order to view the manuals as PDF files.**

**Read This First**

Provides information about safe usage of the projector.

To avoid injury and prevent damage to the projector, be sure to read the section of this manual entitled Safety Information.

**Start Guide**

Provides basic information about how to install the projector and how to project images. Since the contents of this manual are a summary of Operating Instructions, see Operating Instructions for detailed information.

**Operating Instructions**

Provide information about how to install the projector, how to project images using the projector, and how to configure the projector. It also provides information about troubleshooting and maintenance.

The CD-ROM includes only the English manual. For other languages, download the latest version from the website.

**Note**

- The following software products are referred to using general names:

| Product name | General name |
|---|---|
| RICOH JPEG Conversion Tool Type A | JPEG Conversion Tool |

# How to Read This Manual

## Symbols

This manual uses the following symbols:

**Important**

Indicates points to pay attention to when using the projector.

**Note**

Indicates supplementary explanations of the projector's functions, and instructions on resolving user errors.

[ ]

Indicates the names of buttons on the control panel and remote control. It also indicates items displayed on the menu screens.

Region A (mainly Europe and Asia)

Region B (mainly North America)

Differences in the functions of Region A and Region B models are indicated by two symbols. Read the information indicated by the symbol that corresponds to the region of the model you are using. For details about which symbol corresponds to the model you are using, see page 10 "Model-Specific Information".

## Notes

Contents of this manual are subject to change without prior notice.

Two kinds of size notation are employed in this manual.

Some illustrations in this manual might be slightly different from the machine.

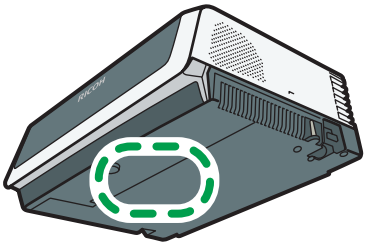
Certain options might not be available in some countries. For details, please contact your local dealer.

Depending on which country you are in, certain units may be optional. For details, please contact your local dealer.

# Model-Specific Information

This section explains how you can identify the region your projector belongs to.

There is a label on the bottom of the projector, located in the position shown below. The label contains details that identify the region your projector belongs to. Read the label.



CUD107

The following information is region-specific. Read the information under the symbol that corresponds to the region of your projector.

Region A (mainly Europe and Asia)

If the label contains the following, your projector is a region A model:

- CODE XXXX -27

Region B (mainly North America)

If the label contains the following, your projector is a region B model:

- CODE XXXX -17

**Note**

- Dimensions in this manual are given in two units of measure: metric and inch. If your projector is a Region A model, refer to the metric units. If your projector is a Region B model, refer to the inch units.

# 1. Preparations for Using the Projector

This chapter explains the names and functions of the different parts of the projector and remote control, and how to use them. It also explains how to position the projector and how to connect it to other equipment.



## Precautions for Using the Projector

### ⚠WARNING

- If metal objects, or water or other fluids fall inside this machine, you must turn off its power immediately. After turning off the power, be sure to disconnect the power cord plug from the wall outlet. Then contact your service representative and report the problem. Do not use the machine. Doing so could result in fire or electric shock.

- Do not use any power sources other than those that match the specifications shown. Doing so could result in fire or electric shock.

- The supplied power cord is for use with this machine only. Do not use it with other appliances. Doing so could result in fire or electric shock.

- It is dangerous to handle the power cord plug with wet hands. Doing so could result in electric shock.

- Do not place the power cord and connection cable in front of the lens or exhaust vents when the product is turned on. Doing so may result in fire.

- Be sure to locate the machine as close as possible to a wall outlet. This will allow easy disconnection of the power cord in the event of an emergency.

- Do not look into the lens or vent when the machine is on. The bright light may damage your eyes. Be especially careful in an environment with children.

- Do not use flammable sprays or solvents in the vicinity of this machine. Also, avoid placing these items in the vicinity of this machine. Doing so could result in fire or electric shock.

### ⚠CAUTION

- Do not place low heat resistant material near the exhaust vents. Hot air may come from the exhaust vents, resulting in damage to the machine or an accident.

- Do not place the power cord and connection cable in a way that might cause someone to trip and fall. The machine might fall over and cause an injury.

## ⚠CAUTION

- Push the power plug all the way into the power outlet. Do not use a power outlet with a loose connection. Doing so may result in heat buildup. Plug the power cord in the correct direction into the base. If they are not plugged in correctly, it could result in smoke, fire, or electric shock.

- When disconnecting the power cord from the wall outlet, always pull the plug, not the cord. Pulling the cord can damage the power cord. Use of damaged power cords could result in fire or electric shock.

- Do not block the projection light when it is on. If you do so, the part that is blocking the projection light may get quite hot and deform, deteriorate or cause a burn or fire. The reflected light may make the lens hot and cause a machine failure. To temporarily suspend projection, select the AV mute function. To suspend longer, turn off the machine.

- Do not increase the volume unless you are listening while increasing the volume. Also, lower the volume before turning off the power, because a loud sound may be emitted when the power is turned on and cause hearing damage.

- Do not tilt the machine horizontally more than ±20 degrees. Doing so may cause the entrance of foreign objects in the housing of the machine which could result in fire or electric shock.

- Power Source
  - Region A (mainly Europe and Asia)

    220–240 V, 1.7 A or more, 50/60Hz
  - Region B (mainly North America)

    120 V, 3.1 A or more, 60Hz

  Please be sure to connect the power cord to a power source as above.

# Main Functions



The projector features the following functions that you can use.

**360-degree installation angle**

The 360-degree installation angle enables tilt-free vertical projection.

**Auto eco function**

The projector switches the lamp power automatically by detecting the brightness of the projecting location and image signals. This function is useful for energy saving.

**Quick on**

The projector starts projection automatically if it detects a device that is connected.

**Horizontal keystone distortion adjustment**

You can adjust for horizontal keystone distortion which occurs when the projector is tilted to the right or left.

**Auto keystone function**

The projector automatically adjusts for the vertical distortion of the projected image according to the angle at which the projector is positioned.

**Automatic focus function (RICOH PJ X3351N/WX3351N only)**

The projector automatically adjusts the focus when you turn on the projector and reposition it.

**AV Mute/Freeze**

Pressing the [AV Mute] button mutes the sound and blanks the screen. Pressing the [Freeze] button freezes the image temporarily.

**Magnify/Zoom**

Pressing the [Magnify] button enlarges the projected image. Pressing the [Zoom] button reduces the projected image.

**Presentation timer function**

Pressing the [Timer] button displays the countdown timer on the projection screen. You can check the elapsed time on the projection screen.

**Wall color mode**

You can adjust the hue of the image in accordance with the color of the wall on which it is projected.

**Password setting/Key lock**

You can specify a password for the projector to limit the people that can use it. The buttons on the control panel can be disabled with the key lock setting to prevent misoperation.

**Administrator authentication**

Enable administrator authentication so that only the administrator can change the security settings. This improves the security of the projector because general users cannot change the settings.

**User logo function**

The projector can project a registered logo or image when there is no signal or when it is starting up.

**Presentations without a computer**

The projector can project JPEG and MPEG files stored on a USB memory device or a digital camera.

It is possible to convert PowerPoint materials to JPEG format using JPEG Conversion Tool and then project them using the projector.

**QuickProjection**

QuickProjection is an application that is provided with the projector and is used for connecting the projector and a computer to project images.

**Miracast (RICOH PJ X3351N/WX3351N/WX4241N only)**

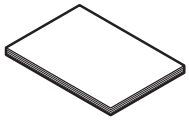
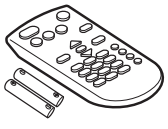
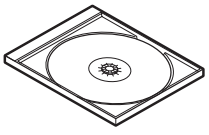
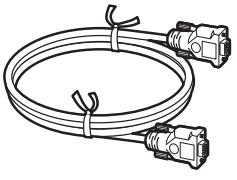
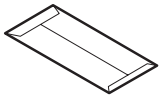
The projector is compatible with Miracast, which allows you to duplicate the screen of your smart device on the projection screen.

# Checking the Accessories



The projector is provided with the following accessories. Make sure that everything is included in the package.

If anything is missing or damaged, contact your sales representative or service representative.

| | |
|---|---|
| Read This First<br>Start Guide |  |
| Remote control<br>AAA battery LR03 |  |
| CD-ROM |  |
| RGB cable |  |
| Power cord |  |
| Warranty card |  |
| Carrying bag<br>(RICOH PJ X3351N/WX3351N only) |  |

**Note**

- The bundled accessories may vary depending on the location that this projector was purchased.
- Use only the RGB cable and power cord provided with the projector.

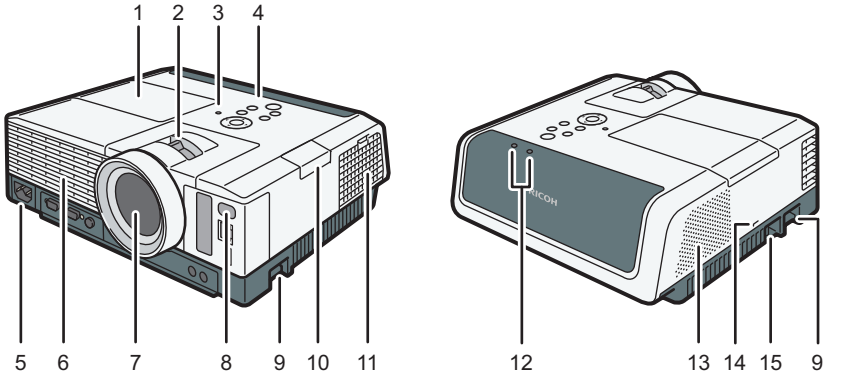
- The various applications are on the provided CD-ROM. For instructions about using the applications, see page 64 "How to Use JPEG Conversion Tool", page 77 "How to Use QuickProjection", and page 151 "Managing the Projector Using Projector Management Utility".

# Projector Parts and Their Functions



## Exterior

The illustrations below depict the RICOH PJ X3351N/WX3351N.




1. **Lamp cover**

   Remove to replace the lamp.

2. **Zoom lever/Focus lever**

   - Zoom lever (RICOH PJ X3351N/WX3351N)

     Adjusts the size of the projected image.

   - Focus lever (RICOH PJ X4241N/WX4241N)

     Adjusts the focus of the projected image.

3. **Illuminance sensor**

   Measures the brightness of the projecting location.

4. **Control panel**

   See page 19 "Control Panel".

5. **AC In socket**

   For connecting the power cord set provided with the projector.

6. **Exhaust vents**

   Releases hot air from inside the projector.

7. **Lens**

   Enlarges and projects the image (light).

8. **Remote control receiver**

   Receives the signal from the remote control.

9. **Adjustable feet**

   Adjusts the angle of the projection. Adjustable feet are located on the left and right sides on the projector.

10. **Interactive kit attachment cover**

    Remove this cover when attaching the adapter for the optional interactive kit. Be sure to disconnect the power cord before attaching or detaching the adapter. Also, be sure to attach the cover before turning on the projector. For detail, see the manual for the interactive kit.

11. **Intake vents**

    For circulating air from the outside to cool the projector. Be sure to use the projector with the intake vents cover attached.

12. **LED indicators**

    You can confirm the status of the projector by referring to the LED indicators. The left LED shows the status of the lamp, and the right LED shows the temperature inside the projector. For details, see page 131 "Indicator Display List".

13. **Speaker**

    Outputs the audio input from an external device.

14. **Security slot**

    For connecting an anti-theft cable.

15. **Security bar**

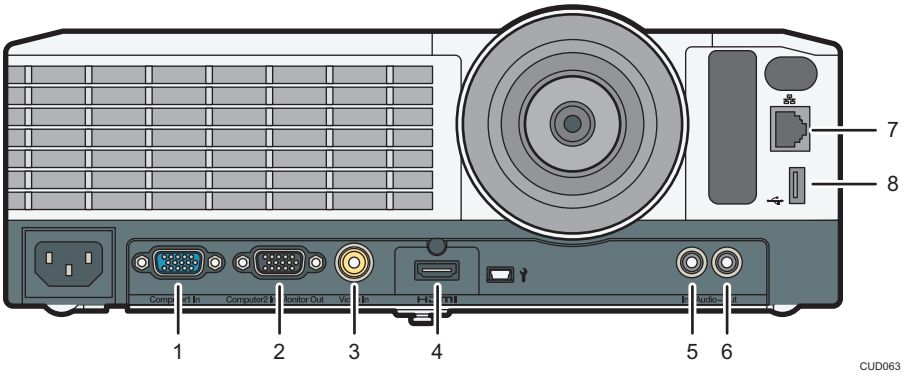
    For connecting an anti-theft cable or chain.

**Note**

- The top of the projector is covered with a protective film when it is shipped. Remove the film before using the projector.

## Ports on the Projector

The illustrations below depict the RICOH PJ X3351N/WX3351N.




1. **Computer1 In port (Y/Pb/Pr)**

   For inputting RGB signals from a computer or component image signals (Y/Pb/Pr) from a video player.

2. **Computer2 In/Monitor Out port**

   For inputting RGB signals, or outputting the image signals input into the "Computer1 In port" to an external display device. You can switch the purpose of this port in [Computer 2 Terminal] under [Default Settings 1].

3. **Video In port**

   For inputting image signals from a video player.

4. **HDMI port**

   For inputting HDMI signals from a computer or video player.

5. **Audio In port**

   For inputting audio signals from a computer or video player.

6. **Audio Out port**

   For outputting audio signals to an external speaker.

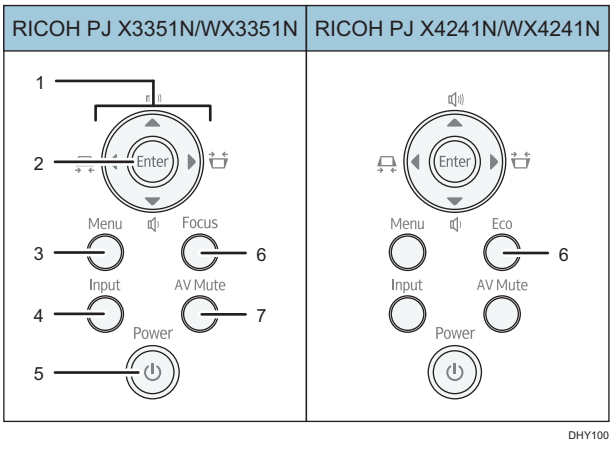
7. **LAN port**

   For connecting an Ethernet cable.

8. **USB port**

   For connecting a USB memory device or USB device cable.

## Control Panel




1. **Arrow buttons**

   Used to operate the menu screen and the value bar. The [◀] and [▶] buttons are used to adjust the keystone distortion. The [▲] and [▼] buttons are used to adjust the volume.

2. **[Enter] button**

   Enters the selected item or mode.

3. **[Menu] button**

   Displays the menu screen. Press it again to close the menu screen.

4. **[Input] button**

   Switches the signal input. For details about how to switch the input signal, see page 38 "Projecting an Image".

5. **[Power] button**

   Turns the projector on and off. You can confirm the status of the projector with the indicator.

   - On: Power is on.
   - Off: Power is off.
   - Flashing at 1 or 3 second intervals: Standby.
   - Flashing at short intervals: Starting up or cooling.

6. **[Focus] button/[Eco] button**

   - [Focus] button (RICOH PJ X3351N/WX3351N)

     Adjusts the focus manually. Press it, and then adjust the focus using the [◀] and [▶] buttons.

   - [Eco] button (RICOH PJ X4241N/WX4241N)

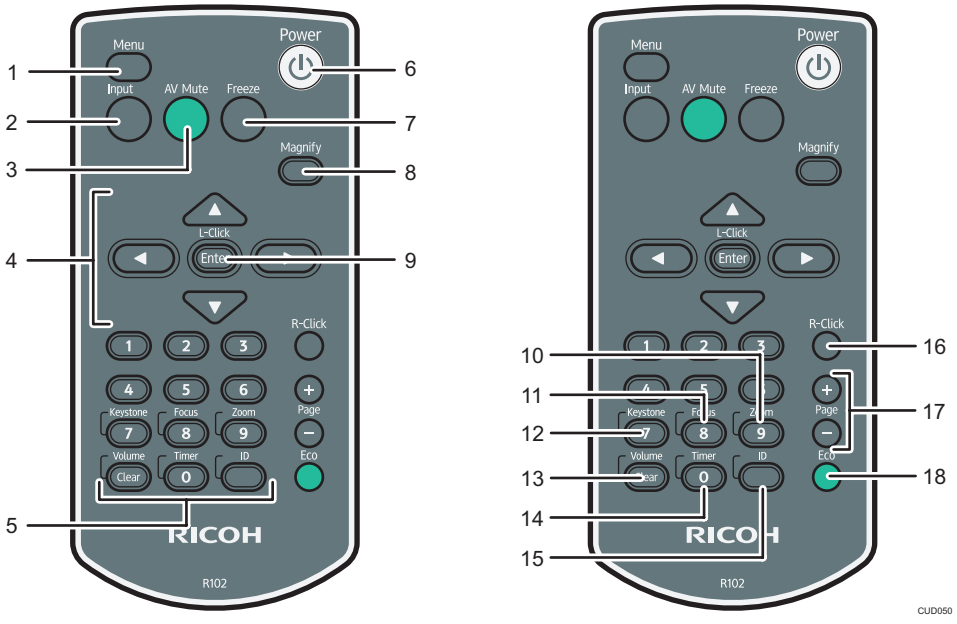
     Displays the [Energy Saving Settings] screen. On the [Energy Saving Settings] screen, you can specify the energy saving settings for the lamp.

7. **[AV Mute] button**

   Temporarily blanks the screen and mutes the audio. The button lights up blue when the projector is muted.

# Remote Control Parts and Their Functions






1. **[Menu] button**

   Displays the menu screen. Press it again to close the menu screen.

2. **[Input] button**

   Switches the signal input. For details about how to switch the input signal, see page 38 "Projecting an Image".

3. **[AV Mute] button**

   Temporarily blanks the screen and mutes the audio. For details, see page 48 "Temporarily Blanking the Image and Muting the Audio".

4. **Arrow buttons**

   Used to operate the menu screen and the value bar.

5. **Number buttons**

   Used to enter numbers.

6. **[Power] button**

   Turns the projector on and off.

7. **[Freeze] button**

   Temporarily freezes the image. For details, see page 49 "Freezing the Image".

8. **[Magnify] button**

   Displays the magnification ratio bar. Press it, and then specify the magnification ratio using the [◀] and [▶] buttons. For details, see page 47 "Enlarging the Image".

9. **[Enter] button**

   Enters the selected item or mode.

10. **[Zoom] button**

    Displays the digital zoom bar. Press it, and then adjust the size of the projected image using the [◀] and [▶] buttons. For details, see page 43 "Reducing the size of the projected image".

11. **[Focus] button**

    - RICOH PJ X3351N/WX3351N

      Adjusts the focus manually. Press it, and then adjust the focus using the [◀] and [▶] buttons. For details, see page 44 "Adjusting the focus of RICOH PJ X3351N/WX3351N".

    - RICOH PJ X4241N/WX4241N

      This button is not used.

12. **[Keystone] button**

    Displays the keystone adjustment bars. Press this, select [Keystone (Vertical)] or [Keystone (Horizontal)] using the [▲] and [▼] buttons, and then adjust the keystone distortion using the [◀] and [▶] buttons. For details, see page 45 "Adjusting for Keystone Distortion".

13. **[Volume] button**

    Displays the volume control bar. Press it, and then adjust the volume of the speaker using the [◀] and [▶] buttons. For details, see page 47 "Adjusting the Volume of the Speaker".

14. **[Timer] button**

    Displays the presentation timer. For details, see page 50 "Using the Presentation Timer".

15. **[ID] button**

    Registers the remote control ID. For details, see page 25 "Operating Multiple Projectors with the Remote Control".

16. **[R-Click] button**

    This button is not used.

17. **[Page] buttons**

    Changes the image while projecting images from a USB device. Press [+] to go to the next page. Press [−] to go to the previous page.

18. **[Eco] button**

    Displays the [Energy Saving Settings] screen. On the [Energy Saving Settings] screen, you can specify the energy saving settings for the lamp. For details, see page 49 "Specifying the Lamp Settings".

# How to Use the Remote Control



You can use the remote control to turn the projector on and off, and to change the signal of the image being input and projected. You can also enlarge or reduce the image and mute the audio.

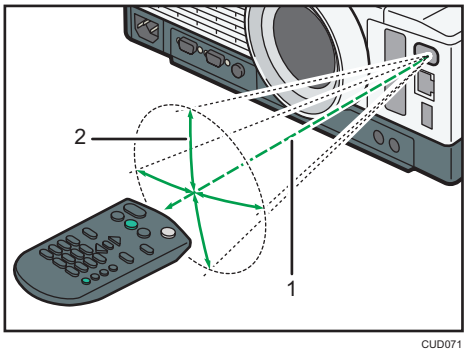
Note the following precautions when using the remote control:

- Do not drop or hit the remote control.
- Do not place the remote control in a place that is very hot or very humid.
- Do not get the remote control wet. Also, do not place it on anything that is wet.
- Do not dismantle the remote control.

## Effective Range of the Remote Control

Point the remote control at the remote control receiver on the projector to use it.

The effective range of the remote control is about 5 meters (16.4 feet) from the receiver and at an angle of about 15 degrees to the remote control receiver on the projector.




CUD071

1. **Distance: up to 5 meters (16.4 feet)**
2. **Angle: within 15 degrees**

**Note**

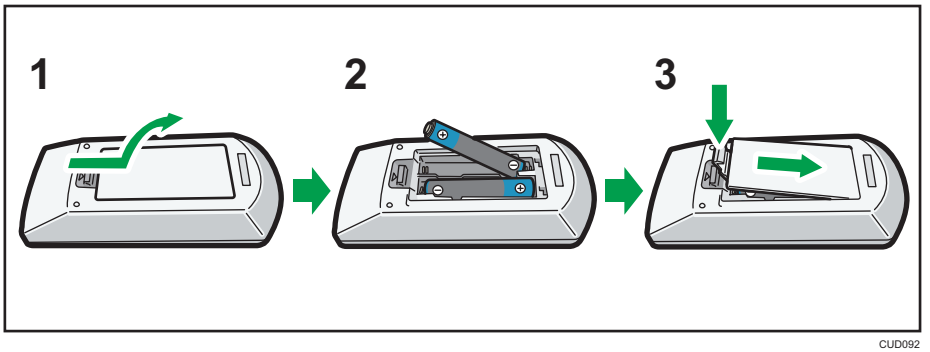
- The remote control may not be effective in some areas and in some conditions. If this happens, point the remote control at the projector and try it again.
- The remote control may not work if the remote control receiver on the projector is exposed to sunlight, fluorescent light, or strong light.
- You can use the remote control from behind the projector by reflecting the signal off of the screen. However, the effective range may change depending on the shape and material of the screen.

## Loading Batteries into the Remote Control

### ⚠WARNING

- For safe operation, follow the warnings below regarding the batteries. If you use the batteries incorrectly, it may result in fire or injury due to batteries leaking or exploding.
  - Do not use batteries other than the ones specified.
  - Do not mix and use batteries that are different types or that are new and old.
  - Correctly insert batteries according to the polarity (+/−).
  - Do not charge non-rechargeable batteries.
  - Do not heat or throw the batteries into fire or water.
  - Do not connect the positive and negative terminals on a battery with a wire.
  - Remove the batteries that are past their suggested use period or that are depleted.
  - Remove the batteries when they will not be used for extended periods.
  - Keep the batteries out of the reach of children. Children may swallow or choke on the batteries. If this happens, contact a doctor immediately.

### Loading batteries




CUD092

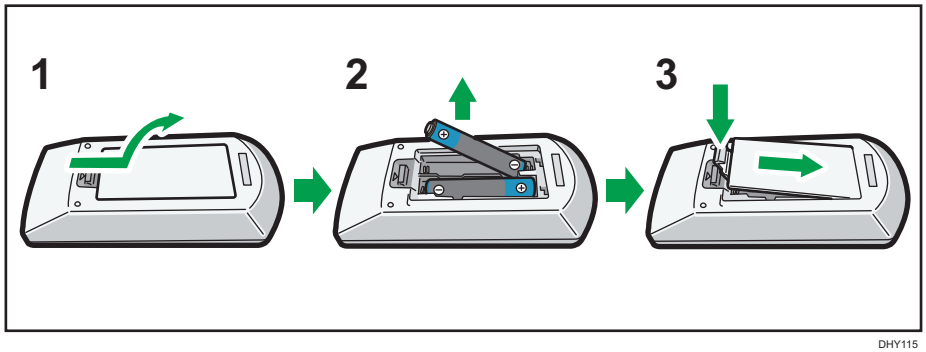
1. **Remove the battery cover from the remote control.**
2. **Insert the batteries.**

   Note the direction of the positive and negative terminals when inserting the batteries.
3. **Close the battery cover.**

**Note**

- Replace the batteries if the remote control does not work or if the effective distance becomes too narrow.

### Removing batteries




DHY115

1. **Remove the battery cover from the remote control.**
2. **Remove the batteries.**
3. **Close the battery cover.**

## Inputting Text

Use the keyboard that is displayed on screen to input text on the setting screen.

1. **Select a character using the [▲], [▼], [◀], and [▶] buttons on the remote control.**

   The selected character is highlighted in orange.
2. **Press the [Enter] button.**

   The selected character appears in the text area.
3. **After inputting all the characters, select [OK].**
4. **Press the [Enter] button.**

**Note**

- You can also use the number buttons on the remote control to input numbers.

## Operating Multiple Projectors with the Remote Control

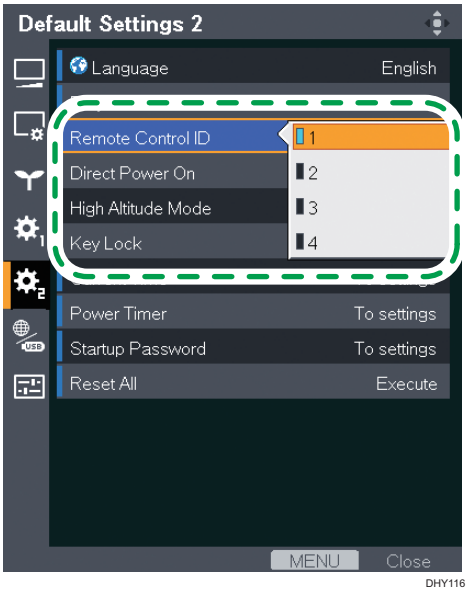
You can operate multiple projectors with a single remote control. It is possible to operate a maximum of four projectors. To operate the projector with the remote control, you must assign the same ID number to the projector and remote control.

Use the following procedure to assign the same ID number to the projector and the remote control.

## Assigning an ID number to the projector

To operate multiple projectors with a single remote control, assign a different ID number to each projector. Use the buttons on the control panel to perform the following procedure.

1. **Press the [Menu] button.**
2. **Select [Default Settings 2], and then press the [▶] button.**
3. **Select [Remote Control ID], and then press the [Enter] button.**
4. **Select the ID number to assign to the projector, and then press the [Enter] button.**

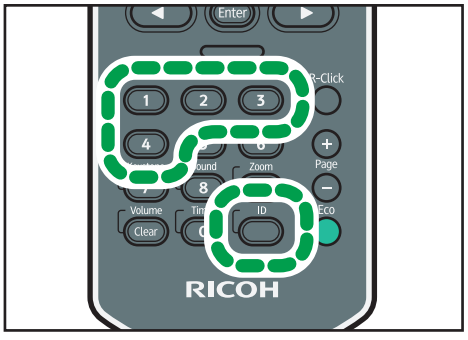



5. **Select [OK] on the confirmation screen, and then press the [Enter] button.**
6. **Press the [Menu] button to close the menu screen.**

## Changing the remote control's ID number

You can switch the ID number of the remote control to match the ID number of a projector. You can check the ID numbers of projectors in [Remote Control ID] in [Default Settings 2].

1. **Press and hold the [ID] button, and then press the number button that is the ID number of the projector you want to operate for at least three seconds.**




CZE109

After the ID number of the remote control is switched, you can operate the projector with the remote control.

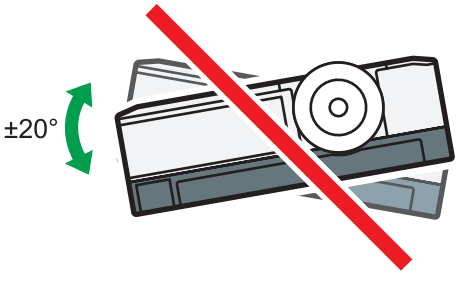
# Positioning the Projector

When positioning the projector, place it so that the projector's lens faces the screen. Make sure the projector and the screen are parallel to each other.

Adjust the distance between the projector and the screen according to the size of the projected image. For details, see page 29 "Relationship Between the Projection Distance and the Screen Size".

**Important**

- **The projector can be installed at any vertical angle. However, the projector cannot be tilted to the left or right. Do not use the projector horizontally inclined (±20 degrees or greater).**




DHY039

- **When the projector is installed on a ceiling with the lens-down, be sure to press the [Power] button and wait until the projector cooling process completes before disconnecting the power cord. Otherwise, you cannot turn the projector back on for up to approximately 25 minutes because it needs to release the internal heat.**
- **When installing the projector lens-up, be sure to secure the projector to the wall or ceiling using brackets.**

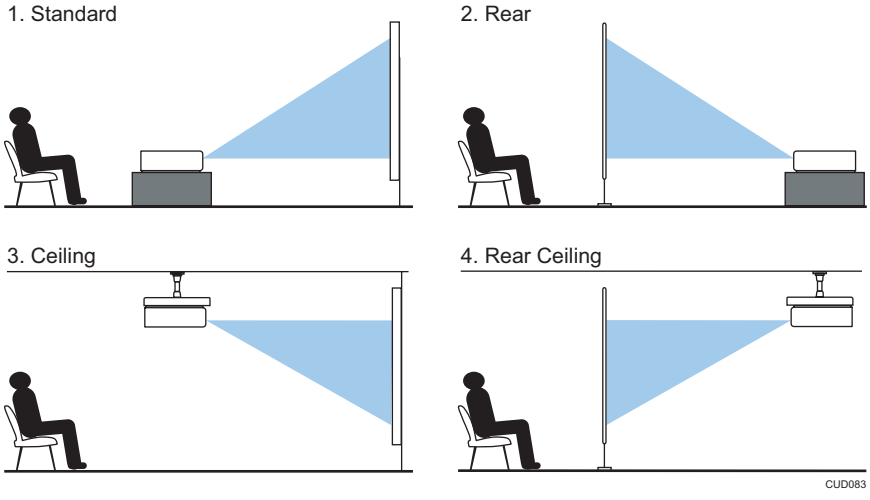
## Projection Mode

### ⚠WARNING

- If a machine is installed and fixed on a wall or ceiling incorrectly, it may fall down and cause an injury. Contact your sales or service representative to install and fix a machine on a wall or ceiling.

Four projection modes are available for the projector.

Select the setting according to the position of the projector in [Projection Mode] under [Default Settings 2]. For details, see page 107 "Default Settings 2 Menu".




1. **Standard**

   The projector is placed in front of a screen onto which the images are projected.

2. **Rear**

   The projector is placed behind a screen onto which the images are projected.

3. **Ceiling**

   The projector is mounted on the ceiling in front of a screen onto which the images are projected.

4. **Rear Ceiling**

   The projector is mounted on the ceiling behind a screen onto which the images are projected.

## Relationship Between the Projection Distance and the Screen Size

The size of the projected image varies according to the distance from the projector to the screen.

Refer to the following tables to position the projector in a suitable position. The projection sizes presented in tables are for a full size image without keystone adjustment. The projection distance becomes shortest when the zoom lever is at the end of the wide side, and longest when the zoom lever is at the end of the tele side.

### RICOH PJ X3351N

| Projection size | a<br>Projection distance | | b<br>Projection height |
|---|---|---|---|
| | Shortest | Longest | |
| 30 inches | 0.68 m (2.22 feet) | 1.05 m (3.45 feet) | 4 cm (1 inch) |
| 40 inches | 0.92 m (3.02 feet) | 1.41 m (4.64 feet) | 5 cm (2 inches) |

| Projection size | a Projection distance | | b Projection height |
|---|---|---|---|
| | Shortest | Longest | |
| 60 inches | 1.40 m (4.58 feet) | 2.13 m (6.99 feet) | 7 cm (3 inches) |
| 80 inches | 1.87 m (6.12 feet) | 2.86 m (9.38 feet) | 10 cm (4 inches) |
| 100 inches | 2.34 m (7.68 feet) | 3.58 m (11.75feet) | 12 cm (5 inches) |
| 120 inches | 2.82 m (9.24 feet) | 4.31 m (14.12 feet) | 14 cm (6 inches) |
| 150 inches | 3.54 m (11.60 feet) | 5.39 m (17.67 feet) | 18 cm (7 inches) |
| 200 inches | 4.73 m (15.50 feet) | 7.20 m (23.61 feet) | 24 cm (9 inches) |

**RICOH PJ WX3351N**

| Projection size | a Projection distance | | b Projection height |
|---|---|---|---|
| | Shortest | Longest | |
| 40 inches | 0.77 m (2.53 feet) | 1.20 m (3.94 feet) | 3 cm (1 inch) |
| 60 inches | 1.18 m (3.87 feet) | 1.80 m (5.92 feet) | 5 cm (2 inches) |
| 80 inches | 1.58 m (5.18 feet) | 2.42 m (7.92 feet) | 6 cm (2 inches) |
| 100 inches | 1.98 m (6.50 feet) | 3.03 m (9.94 feet) | 8 cm (3 inches) |
| 120 inches | 2.39 m (7.84 feet) | 3.65 m (11.98 feet) | 9 cm (4 inches) |
| 150 inches | 2.99 m (9.81 feet) | 4.57 m (14.98 feet) | 11 cm (4 inches) |
| 200 inches | 4.00 m (13.12 feet) | 6.10 m (20.01 feet) | 15 cm (6 inches) |
| 240 inches | 4.81 m (15.79 feet) | 7.33 m (24.06 feet) | 18 cm (7 inches) |

**RICOH PJ X4241N**

| Projection size | a Projection distance | b Projection height |
|---|---|---|
| 50 inches | 0.59 m (1.94 feet) | 6 cm (2 inches) |
| 60 inches | 0.72 m (2.36 feet) | 7 cm (3 inches) |

| Projection size | a<br>Projection distance | b<br>Projection height |
|---|---|---|
| 70 inches | 0.85 m (2.78 feet) | 8 cm (3 inches) |
| 80 inches | 0.97 m (3.20 feet) | 10 cm (4 inches) |
| 90 inches | 1.10 m (3.62 feet) | 11 cm (4 inches) |
| 100 inches | 1.23 m (4.04 feet) | 12 cm (5 inches) |
| 110 inches | 1.36 m (4.46 feet) | 13 cm (5 inches) |
| 120 inches | 1.49 m (4.88 feet) | 14 cm (6 inches) |

**RICOH PJ WX4241N**

| Projection size | a<br>Projection distance | b<br>Projection height |
|---|---|---|
| 60 inches | 0.61 m (2.00 feet) | 5 cm (2 inches) |
| 70 inches | 0.72 m (2.35 feet) | 5 cm (2 inches) |
| 80 inches | 0.83 m (2.71 feet) | 6 cm (2 inches) |
| 90 inches | 0.94 m (3.07 feet) | 7 cm (3 inches) |
| 100 inches | 1.04 m (3.43 feet) | 8 cm (3 inches) |
| 110 inches | 1.15 m (3.78 feet) | 8 cm (3 inches) |
| 120 inches | 1.26 m (4.14 feet) | 9 cm (4 inches) |
| 140 inches | 1.48 m (4.85 feet) | 11 cm (4 inches) |

# Connecting Equipment to the Projector

## ⚠CAUTION

- Do not place the power cord and connection cable in a way that might cause someone to trip and fall. The machine might fall over and cause an injury.

Various equipment can be connected to the projector.

Turn off the power to any equipment before connecting it to the projector. Be sure to read the manual for the applicable equipment before connecting it to the projector.

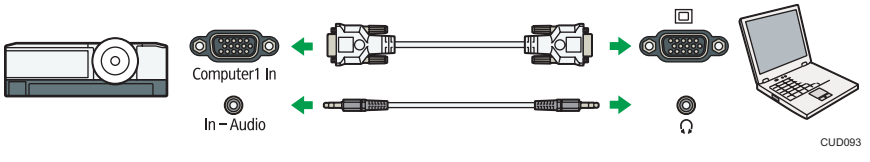
## Connecting a Computer

**Note**

- Some computers cannot be connected to the projector. Before connecting a computer to the projector, check the output terminals and signal compatibility.

### Connecting to the RGB out port

Connect an RGB cable to the Computer1 In port of the projector and to the RGB out port of a computer. To output audio from the speaker on the projector, connect an audio cable to the Audio In port of the projector and to the audio out port of a computer.




**Note**

- Use the RGB cable provided with the projector.
- You can also use the Computer2 In/Monitor Out port to input RGB signals if [Computer 2 Terminal] in [Default Settings 1] is specified as [Input].

### Connecting to the HDMI port

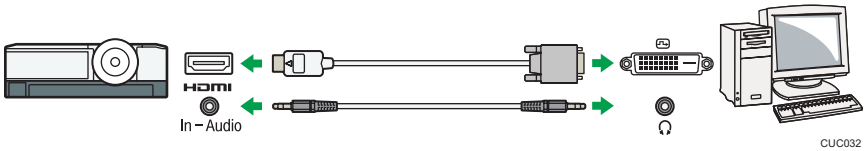
Connect an HDMI cable to the HDMI ports of the projector and the computer.




CUD094

## Connecting to the DVI out port

To input a DVI signal to the projector, connect a DVI-to-HDMI cable to the HDMI port of the projector and to the DVI out port of a computer. To output audio from the speaker on the projector, connect an audio cable to the Audio In port of the projector and to the audio out port of a computer.




CUC032

**Note**

- You can use a DVI-to-HDMI conversion adapter instead of a DVI-to-HDMI cable.

## Connecting via a network using a wired LAN

Connect an Ethernet cable to the LAN port of the projector and to a network device such as a hub. For details about how to connect an Ethernet cable, see page 67 "Connecting an Ethernet Cable". To use the projector via a network, you must specify settings such as the IP address. For details, see page 70 "Connecting the Projector to a Network".



CUD095

**Note**

- Use an Ethernet cable that is shielded.

## Connecting via a network using a wireless LAN

The RICOH PJ X3351N/WX3351N/WX4241N are equipped with a wireless connectivity function. Before using a wireless LAN, see page 68 "Precautions for Using a Wireless LAN". To use the projector via a network, you must specify settings such as the IP address. For details, see page 70 "Connecting the Projector to a Network".



CUD097

## Connecting AV Equipment

Use a cable that supports the signal being input when connecting AV equipment.

### Connecting to the HDMI port

Connect an HDMI cable to the HDMI ports of the projector and the AV equipment.



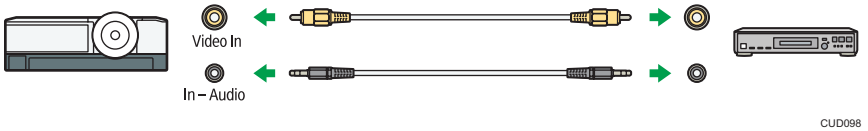

CUD096

**Note**

- Some devices may not operate properly when connected using HDMI.
- Use only an HDMI cable that has the HDMI logo. To input 1080p image signals, use a high-speed HDMI cable. A conventional HDMI cable may not work properly.

### Connecting to the video out port

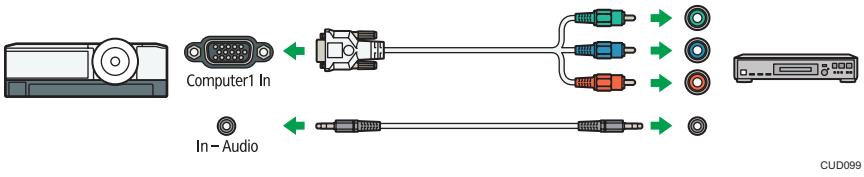
Connect a video cable to the Video In port of the projector and to the video out port of AV equipment. To output audio from the speaker on the projector, connect an audio cable to the Audio In Port of the projector and to the audio out port of AV equipment.




CUD098

### Connecting to the Y/Pb/Pr out port

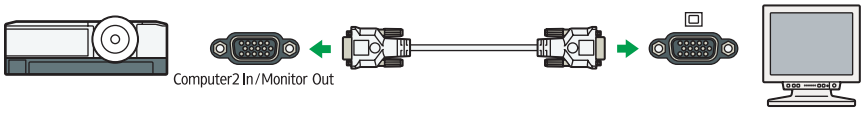
Connect a D-sub to component video cable to the Computer1 In port of the projector and to the Y/Pb/Pr out port of the AV equipment. To output audio from the speaker on the projector, connect an audio cable to the Audio In Port of the projector and to the audio out port of AV equipment.




## Connecting an External Display Device

You can display the projected image on another display simultaneously by connecting the projector and the external display device. The image signals input into the Computer1 In port can be displayed on an external display device.

To connect an external display, specify [Computer 2 Terminal] to [Output]. Then connect an RGB cable to the Computer2 In/Monitor Out port of the projector and the RGB in port of an external display device.

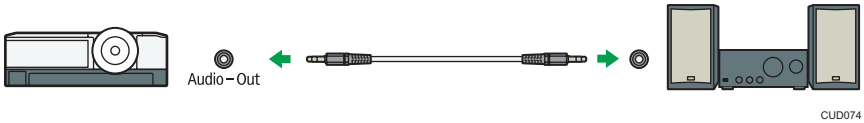



**Note**

- Only the image input from a computer or AV equipment is displayed on the external display device. Images generated by the projector, such as menu screens, are not displayed on the external display device.
- Use the external display device's settings to adjust its display.

## Connecting an External Speaker

You can output the audio signal to an external speaker. To connect an external speaker, connect an audio cable to the Audio Out port of the projector and the audio in port of an external speaker.




**Note**

- There is no sound output from the projector's speaker when an external speaker is connected.
- You can adjust the sound output from the external speaker by using the [Volume] button.

# 2. Projecting an Image

This chapter explains the procedure for projecting an image.



## Basic Operations for Using the Projector

**Note**

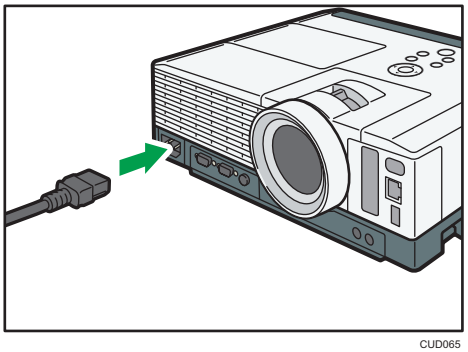
- If [Key Lock] in [Default Settings 2] is specified as [On], you cannot operate the projector from its control panel. Use the remote control.
- If you press a button that is disabled, the projector beeps and the "Invalid operation." or "This function cannot be used on this product." message appears on the screen.
- If [Beep] in [Default Settings 1] is specified as [Off], the projector does not beep.

### Turning On the Projector

**⚠WARNING**

- Be sure to locate the machine as close as possible to a wall outlet. This will allow easy disconnection of the power cord in the event of an emergency.

1. **Insert the connector of the power cord set into the AC In socket on the lens side of the projector.**



CUD065

2. **Insert the power plug into a power outlet.**

   When [Direct Power On] in [Default Settings 2] is set to [On], the projector turns on in this step. Proceed to Step 4.

3. **Press the [Power] button.**



The projector beeps and the indicator flashes blue.

The start-up screen is displayed.

To project an image from the connected equipment, see page 38 "Projecting an Image".

When the projector is turned on for the first time after it is purchased, the start menu appears.

Specify the display language and network settings. For details, see page 38 "When the start menu is displayed".



**Note**

- Do not place anything near the power outlet.
- The password input screen is displayed if a password for the projector is specified in [Startup Password] under [Default Settings 2]. Enter a password.
- The start-up screen closes shortly after appearing. You can specify that the start-up screen not appear in [Start-up Screen] under [Default Settings 1].

### When the start menu is displayed

When the projector is turned on for the first time after it is purchased, specify the display language and network settings. The start menu will also be displayed when [Reset All] in [Default Settings 2] is executed.

1. **Select the display language, and then press the [Enter] button.**
2. **Specify the network settings on Network Setting Wizard.**

   To skip the network settings, select [Cancel]. For details about how to use Network Setting Wizard, see page 70 "Connecting the Projector to a Network".

**Note**

- The display language can also be changed in the menu screen. For details, see page 107 "Default Settings 2 Menu".
- You can also open Network Setting Wizard in the menu screen. For details, see page 112 "Network Settings Menu".

## Projecting an Image

1. **Turn on the equipment that is connected to the projector.**

   To project the image of an AV equipment, press the play button on the AV equipment.

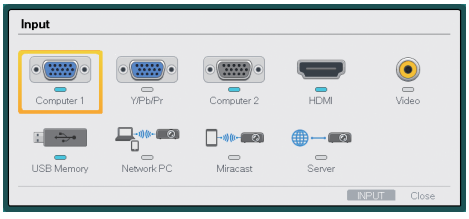
   To project a laptop computer's screen, switch the computer's image output. For details, see page 39 "When projecting the screen of a laptop computer".

   The input signal is detected automatically and the image is projected.

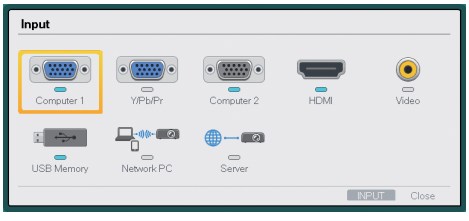
2. **If an image is not projected automatically, press the [Input] button.**

3. **Select an input signal, and then press the [Enter] button.**

RICOH PJ X3351N/WX3351N/WX4241N




RICOH PJ X4241N




**Note**

- If [Auto Input Search] in [Default Settings 1] is specified as [On], pressing the [Input] button changes the input to one that is different from the image signal being input.
- The standby screen for the network input is displayed if the signal is lost or there is no signal being input from the connected equipment. Check that the equipment is turned on and that it is properly connected to the projector.
- If the projector does not support the input signal, a "Unsupported signal" message is displayed.
- The projector's focus may shift slightly if the temperature in the room changes or during the first 30 minutes after the projector is turned on. Readjust the focus if this happens. The focus is more stable when the temperature is stable.
- The brightness of the image may vary temporarily because the lamp may automatically adjust to maintain its condition.

## When projecting the screen of a laptop computer

When connecting a laptop computer to the projector, switch the computer's image output.

In Windows operating systems, the image output can be switched with a function key. While pressing and holding the [Fn] key, press the key, the key, or the LCD/VGA function key.

**Examples of various computers**

| Computer brand | Key combination |
|---|---|
| MSI | [Fn] + [F2] |

| Computer brand | Key combination |
|---|---|
| Everex, MITSUBISHI, NEC, Panasonic, SOTEC | [Fn] + [F3] |
| Gateway, HP | [Fn] + [F4] |
| acer, SHARP, SOTEC, TOSHIBA | [Fn] + [F5] |
| HITACHI, IBM, lenovo, SONY | [Fn] + [F7] |
| ASUS, DELL, EPSON, HITACHI | [Fn] + [F8] |
| FUJITSU | [Fn] + [F10] |

**Note**

- Depending on the computer, the image may not be projected properly if it is displayed on the computer's LCD display while being projected onto the screen by the projector. If this happens, turn off the computer's LCD display. For details about switching the display, see the manual provided with the computer.

## Turning Off the Projector

**Important**

- **Unplug the power cord if the projector will not be used for an extended period of time.**
- **After disconnecting the power cord, wait at least 1 second before connecting the power cord again. Not doing so may result in a malfunction.**

1. **Press the [Power] button.**

   The confirmation screen appears.

2. **Press the [Power] button.**

   The projector beeps and enters the standby mode.

3. **Disconnect the power cord.**

**Note**

- After turning the lamp off, wait about five minutes for the lamp to cool before turning the lamp on again. The lamp may not light if it is very hot.
- The projector turns off as soon as the power cord is disconnected (direct power off).

- You can specify the settings for saving energy in standby mode in [Energy Saving Settings]. For details, see page 102 "Energy Saving Settings Menu".

# Adjusting the Projected Image

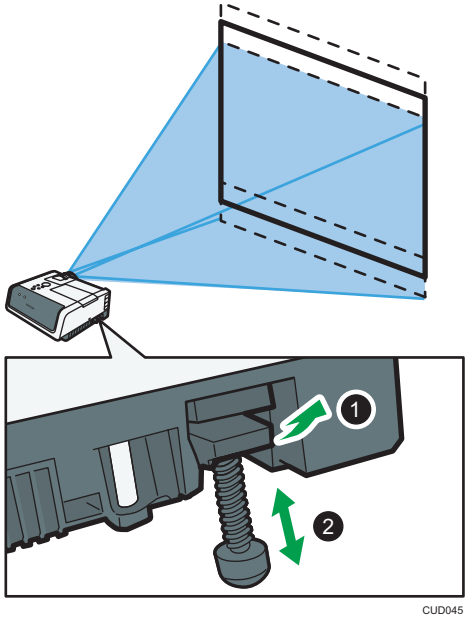
## Adjusting the Angle of the Projection



You can adjust the height of the projected image by using the adjustable feet to change the angle of the projector.

1. **Lift the lens side of the projector.**
2. **While holding the lever (❶), adjust the length of the adjustable feet (❷).**

   Adjust the height of the right and left adjustable feet so the projector is level.




CUD045

**Note**

- The projector automatically adjusts the projected image for keystone distortion according to the projection angle. If [Auto Keystone (Vertical)] in [Display Settings] is specified as [Off], manually adjust for keystone distortion. For details, see page 45 "Adjusting for Keystone Distortion".

## Changing the Size of the Projected Image

If the size of the projected image does not fit the screen, you can change the size of the projected image.

## Reducing the size of the projected image

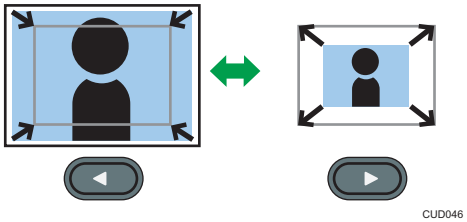
The image can be reduced by 80 to 100% using the digital zoom function.

1. **Press the [Zoom] button.**




The value bar appears at the bottom of the screen.

2. **Adjust the size of the projected image using the [◀] and [▶] buttons.**




Press the [◀] button to reduce the size of the projected image. Press the [▶] button to enlarge the size of the projected image. The image is enlarged until it reaches the original size.

**Note**

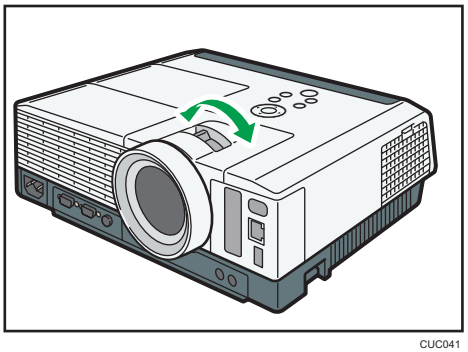
- The image may sometimes be disrupted while it is reduced.

## Enlarging the size of the projected image

The image can be enlarged by 100 to 150% using the optical zoom function.

The optical zoom function is available with RICOH PJ X3351N/WX3351N.

1. **Move the zoom lever to adjust the size of the projected image.**



## Adjusting the Focus

Adjust the focus of the projected image.

### Adjusting the focus of RICOH PJ X3351N/WX3351N



The focus is automatically adjusted by the automatic focus function. The automatic focus function works when you turn on the projector, move the zoom lever, and reposition the projector.

The effective range of the automatic focus function is the following:

- RICOH PJ X3351N: 0.92 to 5.39 m (3.02 to 17.67 feet)
- RICOH PJ WX3351N: 0.77 to 4.57 m (2.53 to 14.98 feet)

When projecting an image beyond the effective range of the automatic focus function or the focus is not adjusted for some other reason, adjust the focus manually.

1. **Press the [Focus] button.**




2. **Adjust the focus using the [◀] and [▶] buttons.**

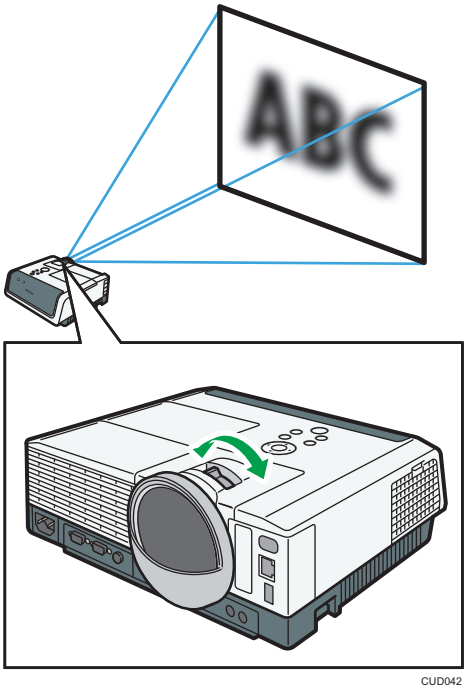
**Note**

- The automatic focus function may not work correctly for the following types of screens:
  - Highly reflective screen such as a whiteboard
  - Black matte screen
- The automatic focus function may not work correctly depending on the projection angle.

### Adjusting the focus of RICOH PJ X4241N/WX4241N

1. **Move the focus lever to adjust the focus.**

   The shape of the projected image changes slightly when the focus lever is moved.




CUD042

## Adjusting for Keystone Distortion

If the projector is placed at an angle, the projected image will be distorted. This is called keystone distortion.

If [Auto Keystone (Vertical)] in [Display Settings] is specified as [Off], manually adjust for keystone distortion.

1. **Press the [Keystone] button.**

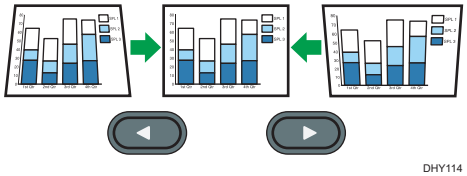



   The value bars appear at the bottom of the screen.

2. **Adjust the keystone distortion using the [◀] and [▶] buttons.**

   Press the [▲] and [▼] buttons to switch between vertical and horizontal adjustments.

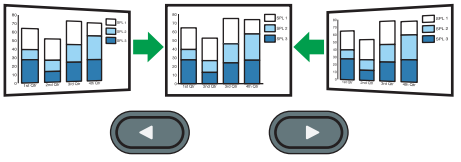
   **When [Keystone (Vertical)] is selected**



DHY114

Press the [◀] button to decrease the width of the bottom of the projected image. Press the [▶] button to decrease the width of the top of the projected image.

**When [Keystone (Horizontal)] is selected**



DHY118

Press the [◀] button to decrease the length of the left edge of the projected image. Press the [▶] button to decrease the length of the right edge of the projected image.

**Note**

- If [4-corner Correction] is enabled in [Display Settings], the screen for selecting [4-corner Correction] or [Keystone(Vert./Horiz.)] is displayed when you press the [Keystone] button. In this case, select [Keystone(Vert./Horiz.)] using the [▲] and [▼] buttons, and then press the [Enter] button. On the confirmation screen, select [OK], and then press the [Enter] button. [4-corner Correction] is disabled and reset to its default.
- Some data may be lost or the image quality may be degraded depending on the degree of the keystone adjustment and the type of the image.
- You can manually adjust for keystone distortion even if [Auto Keystone (Vertical)] is specified as [On]. However, if you change the angle of the projector, it is automatically adjusted again.
- The keystone adjustment level stays registered even if the projector is turned off. We recommend that you specify [Auto Keystone (Vertical)] to [Off] if the projector and screen are permanently installed.
- You can also adjust the keystone distortion from the control panel on the projector.

# Operations while Projecting Images

## Adjusting the Volume of the Speaker

1. **Press the [Volume] button.**




The value bar appears at the bottom of the screen.

2. **Adjust the volume using the [◀] and [▶] buttons.**




Press the [◀] button to decrease the volume. Press the [▶] button to increase the volume.

**Note**

- You can also adjust the volume of the speaker from the control panel on the projector.

## Enlarging the Image

Enlarges and displays a part of the image. The image can be enlarged in a range of 100 to 200%.

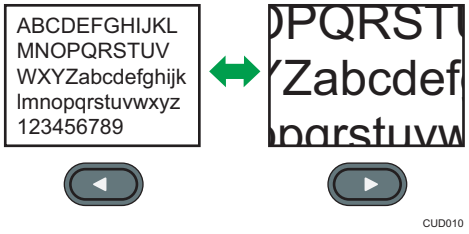
The enlarged image becomes grainy due to the digital processing.

1. **Press the [Magnify] button.**



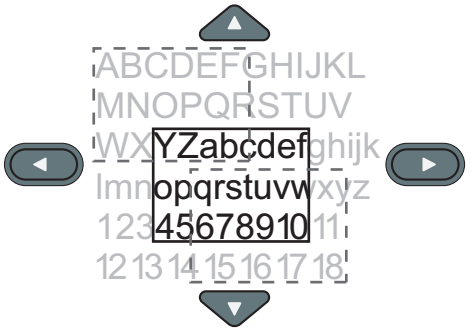

The value bar appears at the bottom of the screen.

2. **Adjust the magnification ratio using the [◀] and [▶] buttons.**



Press the [◀] button to decrease the magnification ratio. Press the [▶] button to increase the magnification ratio.

3. **Press the [Enter] button.**
4. **Move the display position using the [▲], [▼], [◀], and [▶] buttons.**




CUD012

To change the magnification ratio, press the [Enter] button, and then repeat Step 2.

5. **To cancel this function, press the [Magnify] button again.**

**Note**

- The Magnify function is canceled automatically if any operation is performed.
- The image may sometimes be disrupted while it is enlarged or while moving the enlarged portion.

## Temporarily Blanking the Image and Muting the Audio

Temporarily blanks the screen and mutes the audio.

This is useful when projecting images from another projector or an OHP.

1. **Press the [AV Mute] button.**




The image blanks and the audio mutes.

2. **To cancel this function, press the [AV Mute] button again.**

**Note**

- An icon ( ) appears on the screen when AV mute is used.
- The AV mute function is canceled automatically if any button on the control panel is pressed.
- You can also use the [AV Mute] button on the projector's control panel.

## Freezing the Image

Freezes the video or moving image that is being projected.

1. **Press the [Freeze] button.**

   The image freezes.

2. **To unfreeze the image, press the [Freeze] button again.**

**Note**

- An icon ( ) appears on the screen when freeze is used.
- The Freeze function is canceled automatically if any operation is performed.
- The Freeze function is for freezing the image projected on the screen. To pause the video of the connected equipment, use the pause function of the connected equipment.

## Specifying the Lamp Settings

Specify the lamp settings to save energy or to make images brighter according to how you use the projector. You can select the following modes in [Eco Mode]:

**On (Auto)**

Select this mode to save energy. In this mode, the following settings are automatically specified:

- Lamp Power: [Auto]
- Lamp Pwr on No Signal: [Eco]
- Image Eco: [On]

**On (Detailed)**

Select this mode to specify [Lamp Power], [Lamp Pwr on No Signal], and [Image Eco] manually.

**Off**

Select this mode to make images brighter. In this mode, the following settings are automatically specified:

- Lamp Power: [Maximum]
- Lamp Pwr on No Signal: [Std.]
- Image Eco: [Off]

For details about [Lamp Power], [Lamp Pwr on No Signal], and [Image Eco], see page 102 "Energy Saving Settings Menu".

1. **Press the [Eco] button.**




2. **In [Eco Mode], select [On (Auto)], [On (Detailed)], or [Off].**
3. **If you selected [On (Detailed)] in Step 2, specify [Lamp Power], [Lamp Pwr on No Signal], and [Image Eco] manually.**
4. **Press the [Eco] button.**

**Note**

- You can also change the lamp settings with [Energy Saving Settings]. For details, see page 102 "Energy Saving Settings Menu".
- The image may flicker, depending on the characteristics of the lamp, when the power is cut by the Eco Mode. If this happens, disable the Eco Mode.

## Using the Presentation Timer

Displays the timer on the projection screen. This function is useful for time management when you are giving a presentation.

1. **Press the [Timer] button.**




2. **Specify the time period from 1 to 99 minutes using the number buttons.**

   You can also use the [▲] and [▼] buttons to specify the time period.
3. **Select [Display Size] using the [◀] and [▶] buttons, and then select [Large] or [Small] using the [▲] and [▼] buttons.**
4. **Select [Display Position] using the [◀] and [▶] buttons, and then select from the four corners and the center using the [▲] and [▼] buttons.**
5. **Select [Start] using the [◀] and [▶] buttons, and then press the [Enter] button.**

   To stop the countdown, press the [Timer] button, and then select [OK] on the confirmation screen.

   After the time countdown is finished, a message appears and the projector beeps.

**Note**

- The projector does not beep if [Beep] in [Default Settings 1] is specified as [Off].

# 3. Projecting Images from a USB Memory Device or Digital Camera

This chapter explains how to project images from a USB memory device or digital camera.

## Requirements for Projecting Images from a USB Device



**Important**

- **It is recommended to back up the data saved to a USB device before using it. The manufacturer is not responsible for any damage due to the loss of data.**
- **Do not disconnect the power plug while the USB device is being accessed. Doing so may cause malfunction or data loss.**
- **The USB devices must support USB 2.0.**
- **The projector supports FAT16 or FAT32 format USB devices. Other forms of USB device are not compatible.**

The projector can project still images and videos stored on a USB memory device or a digital camera.

The following still images and videos are supported by the projector:

**Still images**

| Item | Requirements |
|---|---|
| File extensions | jpg, jpeg, JPG, JPEG |
| File size | Less than 10 MB |
| Number of pixels | 2 × 2 to 5120 × 5120 pixels |
| File format | Baseline format |

**Videos**

| Item | Requirements |
|---|---|
| File extensions | mpg, mpeg, MPG, MPEG, m2ts, m2t, M2TS, M2T, m2p, M2P, mp4, MP4, mov, MOV |
| File size | Less than 2 GB (FAT16) or 4 GB (FAT32) |
| Number of pixels | 320 × 240 to 1920 × 1080 pixels |

| Item | Requirements |
|---|---|
| Video compression format | • MPEG2 when the container format is MPEG2-PS or MPEG2-TS<br>• H.264 when the container format is MP4 or QuickTime |
| Audio compression format | • MPEG1/2-Audio Layer2 when the container format is MPEG2-PS or MPEG2-TS<br>• Linear PCM when the container format is MPEG2-PS or QuickTime<br>• AAC-LC when the container format is MP4 or QuickTime |
| Container format | MPEG2-PS, MPEG2-TS, MP4, QuickTime |
| Frame rate | Less than 30 fps |
| Bit rate | Less than 20 Mbps (recommended) |



**Note**

- The maximum number of files that can be displayed in the list is 512 per folder.
- Characters that can be used for file names and folder names are single-byte letters and numbers and characters used in the language specified in [Language] under [Default Settings 2]. If characters for languages other than the language specified are used, the file name or folder name will not be displayed properly.
- If the total number of characters in the file name and the path exceeds 255, the file cannot appear on the list.
- Data in a folder that is stored six levels or more into a hierarchy cannot be accessed.
- The projector may not be able to project a file whose compression ratio is low.
- For information about which digital cameras can be used with the projector, contact your sales representative or service representative.

# How to Project Images from USB Memory Device

For basic operations, such as how to turn on the projector or adjust the focus, see page 37 "Projecting an Image".

## Connecting the USB Device

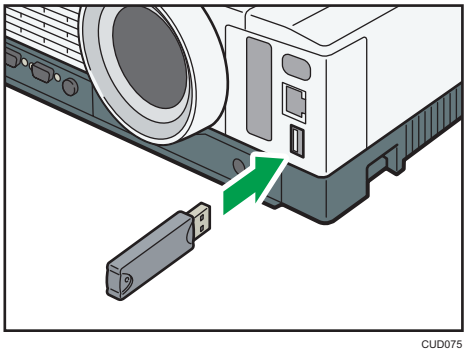


Connect the USB memory device or digital camera to the projector.

The USB device can be connected even if the projector is already on.

1. **Connect the USB device to the USB port on the projector.**

   Check the port orientation before connecting.



CUD075

**Note**

- If the projector does not recognize the USB device when it is connected, disconnect and reconnect the USB device.
- USB hubs cannot be connected.
- If [Auto Start Slideshow] in [USB Settings] is specified as [On], the slide show starts automatically with the files in the root directory as soon as the USB device is connected.

## Projecting Images from a USB Memory Device

Connect the USB memory device or digital camera to the projector. For details, see page 53 "Connecting the USB Device".

1. **If [USB Memory] is not selected as the input signal, press the [Input] button.**

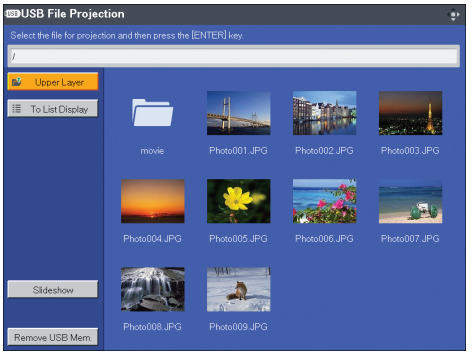



2. **Switch the input signal to [USB Memory].**

   For details about how to switch the input signal, see page page 38 "Projecting an Image".

   The files within the root directory are displayed.

3. **Select the file, [Slideshow], or folder, and then press the [Enter] button.**




- When a file is selected

  If you select a JPEG file, its image is projected. If you select an MPEG file, the video plays.

- When [Slideshow] is selected

  A slide show starts with the files in the current folder.

- When a folder is selected

  The file list within the folder is displayed. Repeat Step 2 until the file you want to project is displayed.

**Note**

- You can also control the projected images using the control panel on the projector.
- Images are displayed in the numerical and alphabetical order of their file name headers.
- You can specify the slide show switching interval for still images in [Display Interval (sec.)] under [USB Settings].
- If a video file is in a folder that has been selected for a slide show, the entire video plays. When the video finishes, the next file is displayed.
- You can switch the display format of the file list. Select [To Thumbnail] to switch to thumbnail display, or select [To List Display] to switch to file name list display.

## Controlling the Projected Image

Use the remote control to control a projected still image or video.

**How to control a still image**

- [Enter] button: Starts the slide show from the projected image. Stops the slide show that is in progress.
- [▶] button: Displays the next image.
- [◀] button: Displays the previous image.
- [▲] button: Rotates the image 90° to the right.
- [▼] button: Rotates the image 90° to the left.
- [Menu] button: Returns to the [USB File Projection] screen.

**How to control a video**

- [Enter] button: Pauses or restarts the video.
- [▶] button: Fast forwards the video. If a video is paused, displays the next image.
- [◀] button: Rewinds the video. If a video is paused, displays the previous image.
- [▲] button: Increases the volume.
- [▼] button: Decreases the volume.
- [Menu] button: Returns to the [USB File Projection] screen.

**Note**

- You can also control the projected videos from the control panel on the projector.
- The rewind and fast forward speed increases three levels each time the button is pressed. To reduce the speed to its original, press the [Enter] button.
- If any operation except for volume adjustment is performed during the slide show, the slide show stops.

## Disconnecting the USB Device

1. **Press the [Menu] button if an image is projected.**

   The [USB File Projection] screen is displayed.

2. **Select [Remove USB Mem.] on the [USB File Projection] screen, and then press the [Enter] button.**

   The confirmation screen is displayed.

3. **Select [OK], and then press the [Enter] button.**
4. **Disconnect the USB device.**

**Note**

- A USB device can also be disconnected by selecting [Remove USB Mem.] in [USB Settings].

# Projecting Images in a Slide Show

## Projecting a Slide Show at a Specified Time

You can project a slide show of files on a USB device at a specified time.

This function is useful if you want to use the projector to decorate a shop window with projected images according to the shop's business hours, for example.

Specify the following two settings to use this function:

- Power Timer

  Use this setting to specify the day and time to project a slide show.

- Auto Start Slideshow

  Enable this setting to automatically start the slide show with the files in the USB device.

This section explains how to set the projector to project the slide show with the files in the USB device automatically from 9:00 to 18:00 every Sunday as an example.

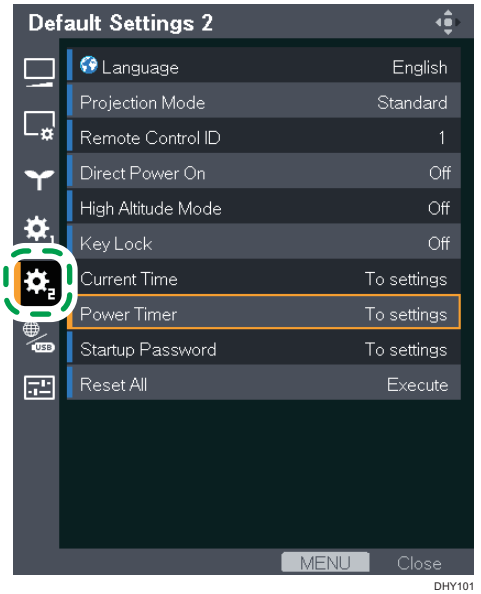
**Important**

- **To use Power Timer, you must set the current time. For details, see page 107 "Default Settings 2 Menu".**
- **This function is not available when [Power on Standby] is set to [Eco] and [NW Settings on Standby] is set to [Do not Use].**

### Specifying Power Timer

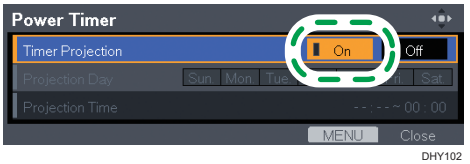
1. **Press the [Menu] button.**

2. Select [Default Settings 2], and then press the [▶] button.



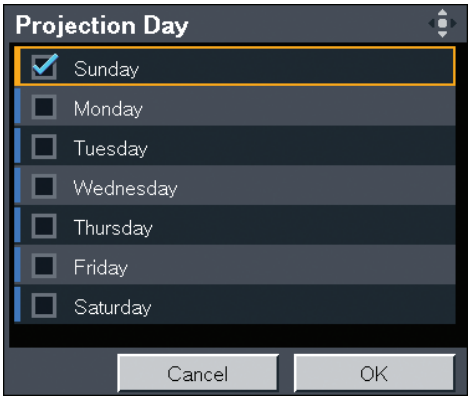

DHY101

3. Select [Power Timer], and then press the [Enter] button.
4. Select [Timer Projection], and then press the [Enter] button.
5. Select [On], and then press the [Enter] button.




DHY102

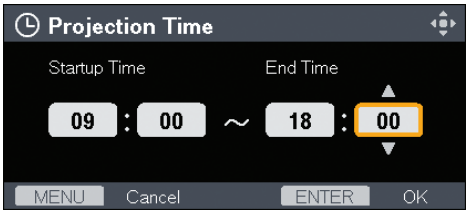
6. Select [Projection Day], and then press the [Enter] button.
7. Select a day to project the slide show (Sunday in this example), and then press the [Enter] button.



8. **Select [OK], and then press the [Enter] button.**
9. **Select [Projection Time], and then press the [Enter] button.**
10. **Specify the startup time (for example: 9:00) using the number buttons.**

    You can also use the [▲] and [▼] buttons to specify the startup time.
11. **Specify the end time (for example: 18:00) using the number buttons.**

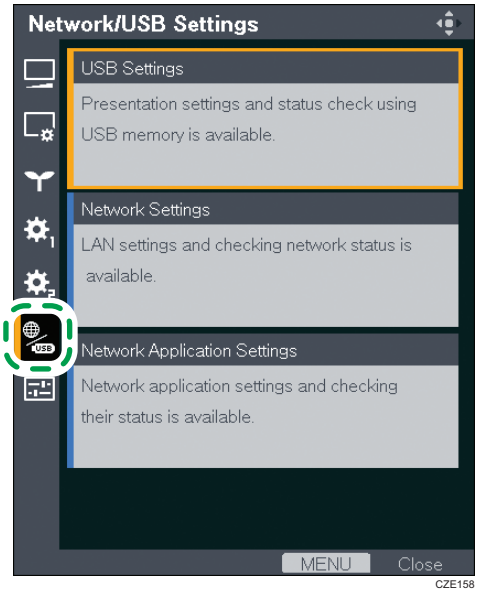
    You can also use the [▲] and [▼] buttons to specify the end time.




12. **Press the [Enter] button.**
13. **Press the [Menu] button twice to close the menu screen.**

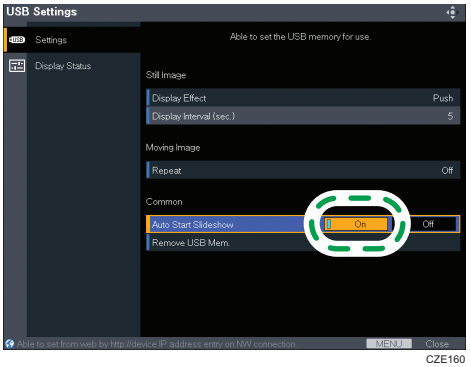
## Enabling Auto Start Slideshow

1. **Press the [Menu] button.**
2. **Select [Network/USB Settings], and then press the [▶] button.**




3. **Select [USB Settings], and then press the [Enter] button.**
4. **Select [Settings], and then press the [▶] button.**
5. **Select [Auto Start Slideshow], and then press the [Enter] button.**

6. **Select [On], and then press the [Enter] button.**



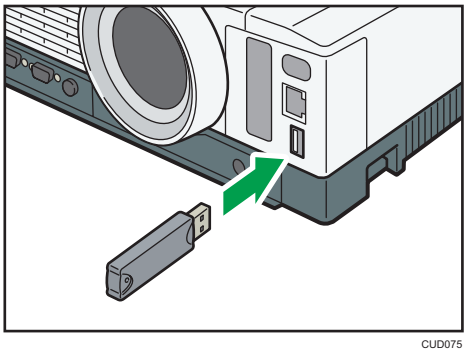

CZE160

7. **Press the [Menu] button.**
8. **Select [Reflect], and then press the [Enter] button.**
9. **Press the [Menu] button to close the menu screen.**

## Connecting a USB device on which files to be projected are stored

1. **Save the files to be projected in the root directory of the USB device.**
2. **Connect the USB device to the USB port on the projector.**

   Check the port orientation before connecting.



CUD075

3. **Press the [Power] button.**




   The confirmation screen appears.

4. **Press the [Power] button.**

   The projector beeps and enters the standby mode.

**Note**

- For details about the USB devices and files supported by the projector, see page 51 "Requirements for Projecting Images from a USB Device".
- Do not disconnect the power cord when using the power timer function. The projector cannot start if the power cord is disconnected.

## Customizing a Slide Show



You can customize the display effect and display interval for a slide show. These functions are useful for decorating shop windows more effectively.

### Changing the display effect for a slide show

You can change the display effect for switching images. The available display effects are the following:

**Push**

The current image is pushed off by the next image.



CZE163

**Wipe**

The current image is wiped off by the next image.



CZE164

**Fade**

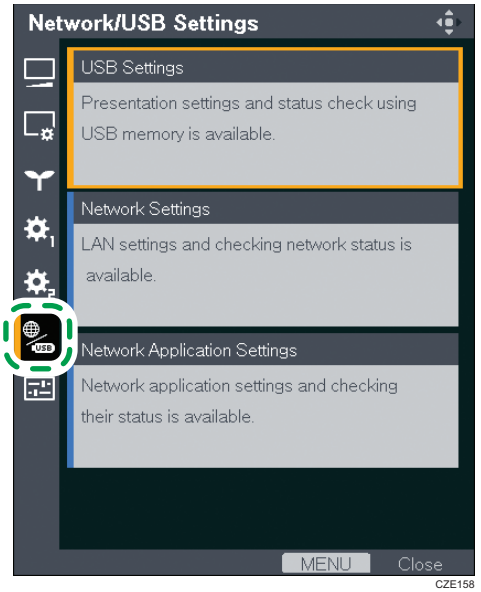
The current image fades out and the next image fades in.



CZE165

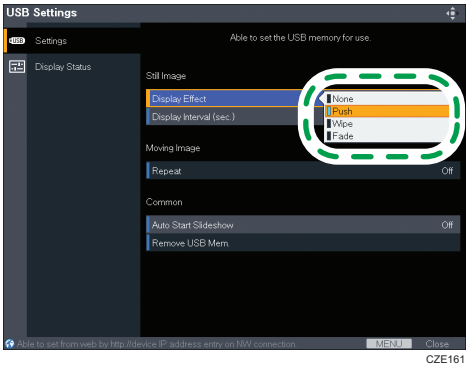
1. **Press the [Menu] button.**

2. **Select [Network/USB Settings], and then press the [▶] button.**




CZE158

3. **Select [USB Settings], and then press the [Enter] button.**
4. **Select [Settings], and then press the [▶] button.**
5. **Select [Display Effect], and then press the [Enter] button.**
6. **Select a display effect, and then press the [Enter] button.**



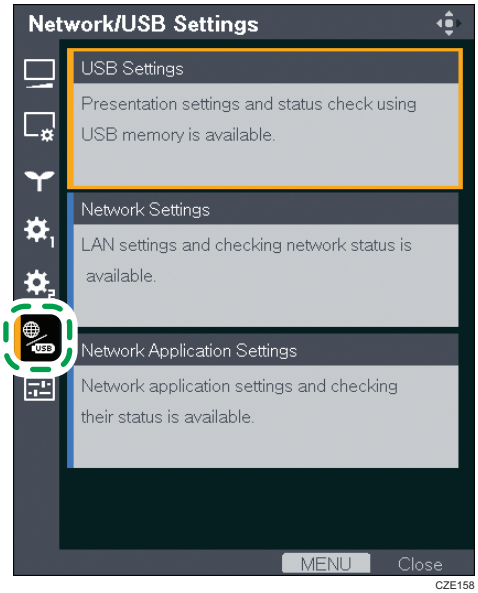

CZE161

7. **Press the [Menu] button.**
8. **Select [Reflect], and then press the [Enter] button.**
9. **Press the [Menu] button to close the menu screen.**

## Adjusting the slide show switching interval

You can adjust the slide show switching interval from 5 to 999 seconds.

1. Press the [Menu] button.
2. Select [Network/USB Settings], and then press the [▶] button.




3. Select [USB Settings], and then press the [Enter] button.
4. Select [Settings], and then press the [▶] button.
5. Select [Display Interval (sec.)], and then press the [Enter] button.
6. Specify a slide show switching interval.
7. Press the [Menu] button.
8. Select [Reflect], and then press the [Enter] button.
9. Press the [Menu] button to close the menu screen.

# Converting Presentation Files to JPEG Files Using JPEG Conversion Tool

Microsoft PowerPoint presentation files can be converted to JPEG files, which are compatible with the projector.

You can do presentations without a computer if you save converted JPEG files to a USB memory device and then display the slides using the projector.

The converted files can also be transferred to a server.



## How to Use JPEG Conversion Tool

JPEG Conversion Tool is included on the supplied CD-ROM.

JPEG Conversion Tool operating environment is described below.

- Supported operating system
  - Windows Vista Ultimate, Business, Home Premium, Home Basic, SP2 or later (32-bit and 64-bit versions)
  - Windows 7 Home Premium, Professional, Ultimate, Enterprise, SP1 (32-bit and 64-bit versions)
  - Windows 8, Pro, Enterprise (32-bit and 64-bit versions)
  - Windows 8.1, Pro, Enterprise (32-bit and 64-bit versions)

1. **Insert the CD-ROM in the CD-ROM drive of your computer.**

   The launcher screen appears.
2. **Specify a language and model name, and then click [Select].**
3. **Click [JPEG Conversion Tool Type A].**
4. **Specify a destination to save the application.**

   The "RICOH JPEG Conversion Tool Type A" folder is copied to the computer.
5. **To create a shortcut icon on the desktop, click [OK].**
6. **Close the screen.**

To start JPEG Conversion Tool, double-click the shortcut icon on the desktop or "RICOH JPEG Conversion Tool TypeA.exe" in the folder.

**Note**

- You can also use JPEG Conversion Tool by dragging and dropping the "RICOH JPEG Conversion Tool Type A" folder that is on the provided CD-ROM to the computer. JPEG Conversion Tool is copied to the computer.

- To delete JPEG Conversion Tool, delete the JPEG Conversion Tool folder that was copied to the computer.

## Converting Presentation Files to JPEG Files

1. **Double-click the "JPEG Conversion Tool" icon.**

   JPEG Conversion Tool starts.

2. **Drag and drop the PowerPoint file to be converted into the "JPEG Conversion Tool" dialog box.**

   To manually specify the file, enter the file name in [File Location:].

3. **Select the resolution of the converted file in the [Resolution] drop-down list.**
4. **To maintain the aspect ratio of the original file, select [Maintain Aspect Ratio of Conversion Source Image].**
5. **Specify the destination to which you want to save the converted file.**

   To save to a computer, select [Local PC], and then specify where to save the file.

   To save to a server, select [Server], and then select the server to which you want to save the file.

6. **Click [Convert&Save].**
7. **Click [OK].**

**Note**

- To convert PowerPoint files, Microsoft PowerPoint 2007, 2010, or 2013 must be installed on the computer to you are using.
- JPEG Conversion Tool is compatible with still images that have a ".ppt" or ".pptx" extension. Animations and audio are not compatible.
- The number of JPEG files created is equivalent to the number of slides. The file name after conversion is "slide + File Number + .jpg".
- For the settings method when saving converted files to the server, refer to the JPEG Conversion Tool Help.

# 4. Using the Projector via a Network

This chapter explains the settings for using the projector via a network. This chapter also explains the operations that use QuickProjection.

## Before Connecting to a Network

The supported network interface differs depending on the model.

| | Wired LAN | Wireless LAN |
|---|---|---|
| RICOH PJ X3351N | Supported | Supported |
| RICOH PJ WX3351N | Supported | Supported |
| RICOH PJ X4241N | Supported | Not supported |
| RICOH PJ WX4241N | Supported | Supported |

The projector does not support the Windows Vista and Windows 7 Network Projector function. Use QuickProjection, which is the application provided with the projector for projecting images via a network. For details about QuickProjection, see page 77 "Projecting a Computer's Screen via a Network".

### Connecting an Ethernet Cable

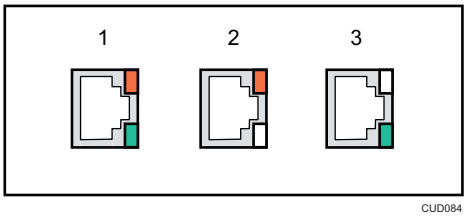
**⚠CAUTION**

- Do not place the power cord and connection cable in a way that might cause someone to trip and fall. The machine might fall over and cause an injury.

The projector is compatible with 10BASE-T, 100BASE-TX, and 1000BASE-T Ethernet interfaces.

**Status of the network connection**

You can confirm the status of the network connection by the patterns in which the LEDs on the Ethernet interface light up. If the projector is not connected to a network, no LEDs light up.

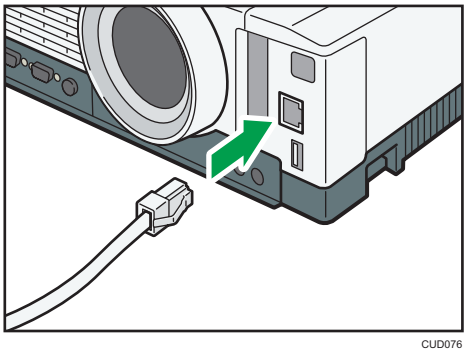



CUD084

1. **When 1000BASE-T is active (orange and green LEDs light up)**

2. **When 100BASE-TX is active (orange LED lights up)**
3. **When 10BASE-T is active (green LED lights up)**

1. **Insert the Ethernet cable into the Ethernet interface.**



CUD076

2. **Connect the other end of the Ethernet cable to a network device such as a hub.**

**Note**

- Use an Ethernet cable that is shielded.

## Precautions for Using a Wireless LAN

### ⚠WARNING

- Do not use a wireless LAN if there is electromagnetic interference from other equipment. Doing so may cause an accident due to the other equipment malfunctioning from the electromagnetic interference.

Wireless uses radio waves to exchange information instead of an Ethernet cable. The wireless LAN radio waves pass through barriers such as walls within a fixed area, so the following problems may occur:

**Leak of Personal Information**

- Information such as IDs, passwords, credit card numbers, and the contents of e-mails, etc., may be stolen by a third party.

**Illegal Access to the Network**

- Data and systems may be corrupted or manipulated by a virus.
- An imposter may access information illegally.
- Confidential information may be accessed illegally.

To minimize the possibility of these problems occurring, it is recommended to check the functions built into the wireless LAN devices, such as the projector and wireless LAN access points, and to specify security settings.

**Note**

- Region A (mainly Europe and Asia)
  The projector does not support the 5 GHz band.
- Region B (mainly North America)
  The projector supports 40 MHz channels only in the 5 GHz band and in the infrastructure mode.

# Connecting the Projector to a Network

To connect the projector to a network, you must specify network settings such as an IP address. The required settings differ depending on the network environment and how you use the projector.

You can configure the required settings easily by using Network Setting Wizard. For details about how to open Network Setting Wizard, see page 71 "Opening Network Setting Wizard".

**To connect to a wired LAN**

Connect an Ethernet cable to the projector, and then configure the network settings in [Wired LAN] on Network Setting Wizard. For details about how to configure the wired LAN network settings, see page 72 "Configuring the Wired LAN Settings".



**To connect to a wireless LAN in infrastructure mode**

In infrastructure mode, the projector can communicate with networks in which both wireless and wired LAN devices are connected via a wireless LAN access terminal. It is necessary to user greater security since all communication is via a network. Use infrastructure mode in environments in which a wireless LAN has already been configured.

Configure the network settings in [Wireless LAN (Infrastructure)] on Network Setting Wizard. The setting method differs depending on the network environment.

- Configuring the settings by Simple Wireless LAN Setup

  If the access point is compliant with the simple wireless LAN setup function, you can configure the network settings easily. This function acquires the wireless LAN settings registered in the access point, and configures those settings for the projector automatically. You can configure the settings without entering the SSID and the network key manually. For details, see page 73 "Configuring the settings by Simple Wireless LAN Setup".

- Configuring the settings manually

  You can configure the network settings by selecting the network to connect to from the available network list. Up to 10 networks are displayed in the list in radio field intensity order.

  If you want to connect to a network that is not displayed in the list or is not broadcasting its SSID, enter the SSID manually. For details, see page 74 "Configuring the settings manually".

**To connect to a wireless LAN in ad hoc mode**

In ad hoc mode, the projector can communicate with the computer directly, and not via an access point. No other equipment is required, so this mode is suited for locations that have no network environment. As the radio wave range is limited, use an office or conference room with a good line of sight.

Configure the network settings in [Wireless LAN (Adhoc)] on Network Setting Wizard. For details about how to configure the network settings for a wireless LAN in ad hoc mode, see page 76 "Configuring the Wireless LAN Settings for Ad Hoc Mode".

**Important**

- When the projector is connected to a wired and a wireless LAN simultaneously, assign the projector with IP addresses of different network segments. If IP addresses of the same network segment are assigned, the projector may not operate correctly.
- If your wireless LAN access point uses WPA/WPA2-EAP as the authentication method, you must set the current date and time and the time zone of the location where the projector is installed. For details, see page 107 "Default Settings 2 Menu".

## Opening Network Setting Wizard

You can open Network Setting Wizard on the menu screen.



**Important**

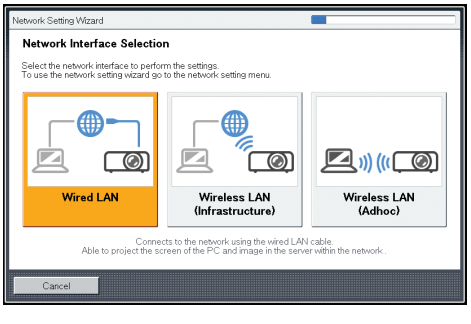
- If you configure both wired and wireless LAN settings using the Network Setting Wizard and your wireless LAN access point uses WPA/WPA2-EAP as the authentication method, it is recommended that you configure the wired LAN settings first.

1. Press the [Menu] button.
2. Select [Network/USB Settings], and then press the [▶] button.
3. Select [Network Settings], and then press the [Enter] button.
4. Select [Setup Wizard], and then press the [▶] button.
5. Select [Network Setting Wizard], and then press the [Enter] button.

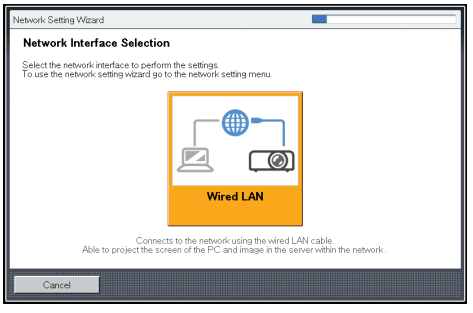
   If Administrator Authentication is enabled, enter the password, and then press the [Enter] button.

   The Network Setting Wizard appears.

   RICOH PJ X3351N/WX3351N/WX4241N




   RICOH PJ X4241N




## Configuring the Wired LAN Settings

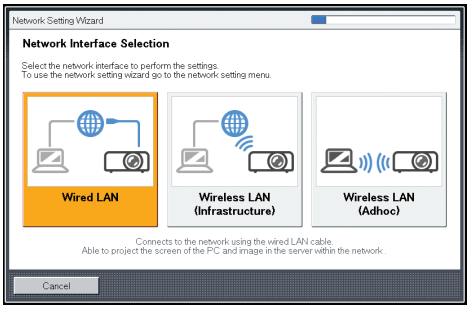


Connect an Ethernet cable to the projector before configuring the settings.

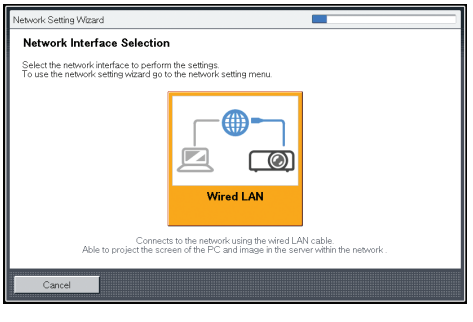
Contact your network administrator for the information required for configuring network settings.

1. **Select [Wired LAN] on Network Setting Wizard, and then press the [Enter] button.**

   RICOH PJ X3351N/WX3351N/WX4241N




   RICOH PJ X4241N




2. **Select [Disable DHCP (Manual Settings)] or [Enable DHCP (Auto Settings)], and then press the [Enter] button.**

   If you select [Enable DHCP (Auto Settings)], proceed to Step 6.

3. **Specify the projector's IP address.**
4. **Specify the subnet mask.**

5. **Specify the default gateway.**
6. **Select [Continue Wizard] or [End Wizard] on the confirmation screen, and then press the [Enter] button.**

   To proceed to the wireless LAN settings, select [Continue Wizard]. For details about how to configure the wireless LAN settings, see page 73 "Configuring the Wireless LAN Settings for Infrastructure Mode", or page 76 "Configuring the Wireless LAN Settings for Ad Hoc Mode".

   To end the network settings, select [End Wizard].

   The wired LAN setup is complete.

   To project the image from a computer, see page 77 "Projecting a Computer's Screen via a Network".



## Configuring the Wireless LAN Settings for Infrastructure Mode

### Configuring the settings by Simple Wireless LAN Setup

The projector supports the following simple wireless LAN setup method. Contact your network administrator for the available simple wireless LAN setup method in your network environment and the information required for configuring network settings.

**Setup Method**

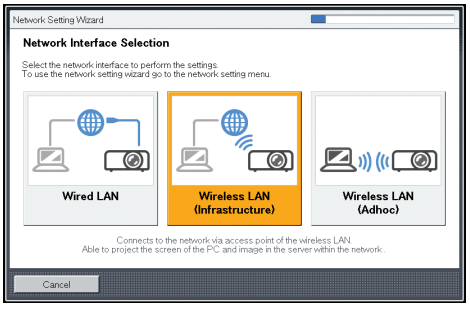
- Using push buttons

  Press the projector and access point keys or buttons to get them to connect to each other and register the settings.

- Entering the projector's PIN code in the access point

  Enter the projector's PIN code in the access point so that the projector and the access point authenticate and register each other. The projector's PIN code can be changed. For details about entering the PIN code in the access point, see the manual provided with the access point.

1. **Select [Wireless LAN (Infrastructure)] on Network Setting Wizard, and then press the [Enter] button.**



2. **Select [Perform Simple Wireless LAN Setup], and then press the [Enter] button.**
3. **Select either [Connect by PIN] or [Connect by Push], and then press the [Enter] button.**
4. **If [Connect by PIN] is selected, enter the PIN code of the projector displayed on the screen into the access point, and then proceed to Step 6.**

   You must preconfigure the access point's simple wireless LAN setup function.
5. **If [Connect by Push] is selected, press the access point push button.**
6. **When the message "Connected to the wireless LAN device." is displayed, press the [Enter] button.**
7. **Select [Disable DHCP (Manual Settings)] or [Enable DHCP (Auto Settings)], and then press the [Enter] button.**

   If you select [Enable DHCP (Auto Settings)], proceed to Step 11.
8. **Specify the projector's IP address.**
9. **Specify the subnet mask.**
10. **Specify the default gateway.**
11. **If the message "To perform connection by WPA/WPA2-EAP, continuous setting on Network Setting Menu: Wireless LAN: Security is required." appears, press the [OK] button and continue configuring the wireless LAN settings in the Network Settings menu. Otherwise, proceed to Step 12.**

    For details about how to set up the wireless LAN connection by WPA/WPA2-EAP, see page 112 "Network Settings Menu".
12. **Select [Continue Wizard] or [End Wizard] on the confirmation screen, and then press the [Enter] button.**

    To proceed to the wired LAN settings, select [Continue Wizard]. For details about how to configure the wired LAN settings, see page 72 "Configuring the Wired LAN Settings".

    To end the network settings, select [End Wizard].

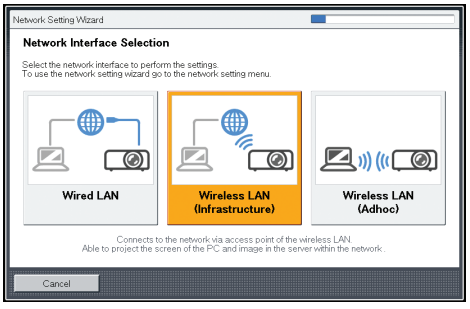
    The wireless LAN setup is complete.

    To project the image from a computer, see page 77 "Projecting a Computer's Screen via a Network".

## Configuring the settings manually

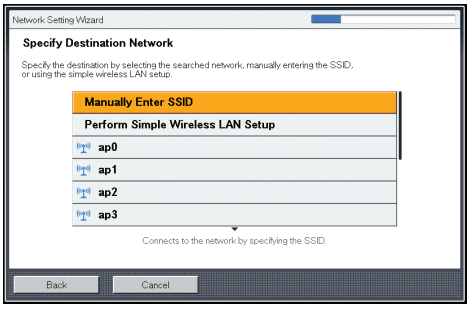
Contact your network administrator for the information required for configuring network settings, such as the SSID and the network key.

1. **Select [Wireless LAN (Infrastructure)] on Network Setting Wizard, and then press the [Enter] button.**




   The list of wireless LAN networks that can be connected is displayed.

2. **Select a wireless LAN network or [Manually Enter SSID], and then press the [Enter] button.**




3. **If you select [Manually Enter SSID] in Step 2, enter the SSID, and then press the [Enter] button.**
4. **Enter the network key.**

   When connecting to a network for which a network key is not set, the network key input screen is not displayed. Proceed to Step 5.

5. **Select [Disable DHCP (Manual Settings)] or [Enable DHCP (Auto Settings)], and then press the [Enter] button.**

   If you select [Enable DHCP (Auto Settings)], proceed to Step 10.

6. **Specify the projector's IP address.**
7. **Specify the subnet mask.**
8. **Specify the default gateway.**
9. **If the message "To perform connection by WPA/WPA2-EAP, continuous setting on Network Setting Menu: Wireless LAN: Security is required." appears, press the [OK]**

**button and continue configuring the wireless LAN settings in the Network Settings menu. Otherwise, proceed to Step 10.**

For details about how to set up the wireless LAN connection by WPA/WPA2-EAP, see page 112 "Network Settings Menu".

10. **Select [Continue Wizard] or [End Wizard] on the confirmation screen, and then press the [Enter] button.**

    To proceed to the wired LAN settings, select [Continue Wizard]. For details about how to configure the wired LAN settings, see page 72 "Configuring the Wired LAN Settings".

    To end the network settings, select [End Wizard].

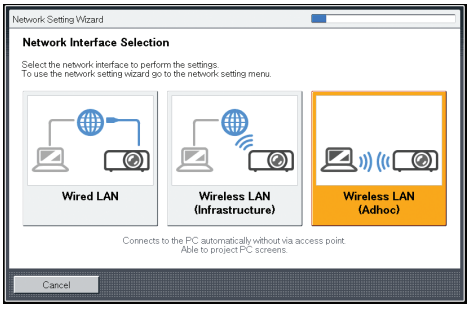
    The wireless LAN setup is complete.

    To project the image from a computer, see page 77 "Projecting a Computer's Screen via a Network".



## Configuring the Wireless LAN Settings for Ad Hoc Mode

1. **Select [Wireless LAN (Adhoc)] on Network Setting Wizard, and then press the [Enter] button.**




    The network settings are configured automatically.

2. **Select [Continue Wizard] or [End Wizard] on the confirmation screen, and then press the [Enter] button.**

    To proceed to the wired LAN settings, select [Continue Wizard]. For details about how to configure the wired LAN settings, see page 72 "Configuring the Wired LAN Settings".

    To end the network settings, select [End Wizard].

    The wireless LAN setup is complete.

    To project the image from a computer, see page 77 "Projecting a Computer's Screen via a Network".

# Projecting a Computer's Screen via a Network

The projector does not support the Network Projector function of Windows. Use QuickProjection, which is the application provided with the projector for projecting a computer's screen via a network.

This section explains how to use QuickProjection in Windows as an example. The basic operation flow is the same as when a Mac OS is used.

## How to Use QuickProjection

QuickProjection is included on the supplied CD-ROM.

QuickProjection operating environment is described below.

- Supported operating system
  - Windows Vista Ultimate, Business, Home Premium, Home Basic, SP2 or later (32-bit and 64-bit versions)
  - Windows 7 Home Premium, Professional, Ultimate, Enterprise, SP1 (32-bit and 64-bit versions)
  - Windows 8, Pro, Enterprise (32-bit and 64-bit versions)
  - Windows 8.1, Pro, Enterprise (32-bit and 64-bit versions)
  - Mac OS X 10.7-10.9

1. **Insert the CD-ROM in the CD-ROM drive of your computer.**

   The launcher screen appears.
2. **Specify a language and model name, and then click [Select].**
3. **Click [QuickProjection].**
4. **Specify a destination to save the application.**

   The "QuickProjection.exe" is copied to the computer.
5. **To create a shortcut icon on the desktop, click [OK].**
6. **Close the screen.**

To start QuickProjection, double-click the shortcut icon on the desktop or "QuickProjection.exe".

**Note**

- Actual flow may vary according to the operating system used. Follow the on-screen instructions to use QuickProjection.
- You can download the latest version of QuickProjection from our website. Access the URL displayed on the standby screen for [Network PC] input.
- You can also use QuickProjection by dragging and dropping the "QuickProjection.exe" that is on the provided CD-ROM into the computer or a USB memory device.

- To delete QuickProjection, delete "QuickProjection.exe" and the "QuickProjection" folder in "%appdata%\RICOH". For details about how to delete Quick Projection, see QuickProjection Help.
- Two versions of QuickProjection are available for Mac OS, one supports audio and the other does not.

## Projecting Images Using QuickProjection

**Important**

- **To project images by ad hoc wireless communication, log in to the computer with administrator privileges.**
- **Depending on the settings of the computer, the password input screen is displayed when you start QuickProjection. Enter an administrator's password.**



Before projecting images using QuickProjection, connect the projector to a network. For details about how to connect the projector to a network, see page 70 "Connecting the Projector to a Network".

For basic operations, such as how to turn on the projector or adjust the focus, see page 37 "Projecting an Image".

1. **Turn the projector on.**
2. **If [Network PC] is not selected as the input signal, press the [Input] button.**

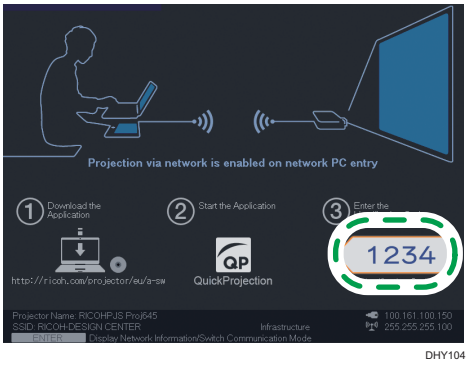



3. **Switch the input signal to [Network PC].**

   For details about how to switch the input signal, see page page 38 "Projecting an Image".

   The standby screen for [Network PC] input appears.

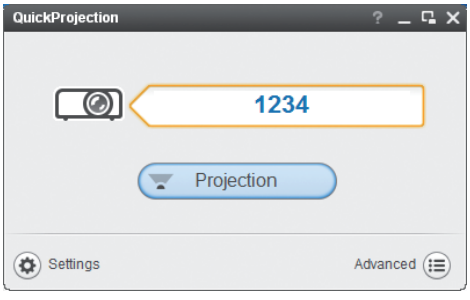
4. **Check the 4-digit number (identification code) on the projection screen.**




DHY104

5. **Double-click the "QuickProjection" icon on the computer.**

6. **Enter the identification code on the QuickProjection dialog.**




The projector's name or IP address can also be entered instead of the identification code.

7. **Click [Projection].**

The computer's screen is projected.

While the computer's screen is being projected, a small QuickProjection is displayed in the lower right corner of the computer's screen.



To pause the projection, click  .

To quit the projection, click [×], and then click [OK].

**Note**

- For detailed QuickProjection operating methods, refer to the QuickProjection Help.
- If the display resolution of the computer screen and the projector matches, the image quality is better. We recommend setting the resolution of the computer screen to the following:
  - RICOH PJ X3351N/X4241N: 1024 × 768
  - RICOH PJ WX3351N/WX4241N: 1280 × 800

# Projecting Images Using DLNA-Compatible Devices

The projector is compatible with DLNA. DLNA is the guideline for sharing content on a network.

Therefore, the projector can project still images and videos transmitted from DLNA-compatible devices. The projector can also access DLNA-compatible devices such as file servers, tablet computers, or smartphones and project JPEG files stored on them.

The supported file types for the DLNA-compatible devices are shown below:



**Still images**

| Item | Requirements |
|---|---|
| File extensions | jpg, jpeg, JPG, JPEG |
| File size | Less than 10 MB |
| Number of pixels | 2 × 2 to 5120 × 5120 pixels |
| File format | Baseline format |

**Videos**

| Item | Requirements |
|---|---|
| File extensions | mpg, mpeg, MPG, MPEG, m2ts, m2t, M2TS, M2T, m2p, M2P, mp4, MP4, mov, MOV |
| Number of pixels | 320 × 240 to 1920 × 1080 pixels |
| Video compression format | • MPEG2 when the container format is MPEG2-PS or MPEG2-TS<br>• H.264 when the container format is MP4 or QuickTime |
| Audio compression format | • MPEG1/2-Audio Layer2 when the container format is MPEG2-PS or MPEG2-TS<br>• Linear PCM when the container format is MPEG2-PS or QuickTime<br>• AAC-LC when the container format is MP4 or QuickTime |
| Container format | MPEG2-PS, MPEG2-TS, MP4, QuickTime |
| Frame rate | Less than 30 fps |
| Bit rate | Less than 20 Mbps (recommended) |

**Note**

- The supported video file types are compliant with the projector's own specifications. They are not compliant with the DLNA 1.5 guidelines.
- The maximum number of files that can be displayed in the list is 512 per folder.
- Characters that can be used for file names and folder names are single-byte letters and numbers and characters used in the language specified in [Language] under [Default Settings 2]. If characters for languages other than the language specified are used, the file name or folder name will not be displayed properly.
- If the total number of characters in the file name and the path exceeds 255, the file cannot appear on the list.
- Data in a folder that is stored six levels or more into a hierarchy cannot be accessed.



## Preparation

To project files transmitted from DLNA-compatible devices or access DLNA-compatible devices from the projector, the projector and the DLNA-compatible devices must be connected to a network. For details about how to connect the projector to a network, see page 70 "Connecting the Projector to a Network". For details about how to use DLNA-compatible devices, see the manuals provided with the DLNA-compatible devices.

In addition, following settings are necessary:

- To project files transmitted from DLNA-compatible devices, select [Enable] in [Remote Projection Control] under [Network Application Settings]. For details, see page 121 "Network Application Settings Menu".
- To project files stored on the DLNA-compatible device, you must configure the file sharing settings on the device. For details about how to use DLNA-compatible devices, see the manuals provided with the DLNA-compatible devices.

**Note**

- The projector is certified to DLNA 1.5 guidelines for still images. If [DLNA Certification Mode] in [Network Application Settings] is specified as [Enable], the projector works as a DLNA-certified device and video playback is restricted. If this setting is specified as [Disable], the projector can also project MPEG files.
- Depending on the device used for this function, you may need to install a DLNA application on the device.

## Projecting Images from DLNA-Compatible Devices

For basic operations, such as how to turn on the projector or adjust the focus, see page 37 "Projecting an Image".

The procedure of the DLNA-compatible device described below is an outline of the basic flow. The detailed procedure varies depending on the device and application. For details, see the manuals provided with the device and application.

1. **Turn the projector on.**
2. **If [Network PC] is not selected as the input signal, press the [Input] button.**

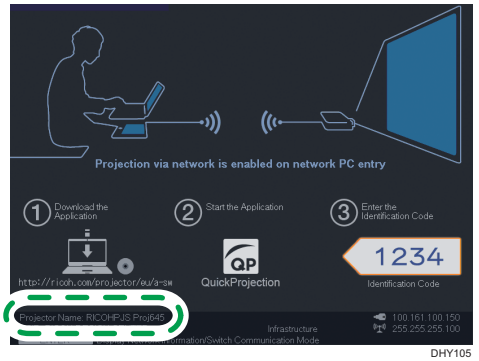



3. **Switch the input signal to [Network PC].**

   For details about how to switch the input signal, see page 38 "Projecting an Image".

   The standby screen for [Network PC] input appears.

4. **Check the projector name on the projection screen.**




DHY105

5. **On the DLNA-compatible device, select the projector name checked in Step 3 as a destination device.**
6. **On the DLNA-compatible device, select the file you want to project.**

   The selected file is projected.

**Note**

- For details about how to control the projected image and stop the projection, see the manuals provided with the DLNA-compatible devices and applications.

## Projecting Images Stored on the DLNA Server

For basic operations, such as how to turn on the projector or adjust the focus, see page 37 "Projecting an Image".

## Projecting files

1. **Turn the projector on.**
2. **Press the [Input] button to switch the input signal to [Server].**

   For details about how to switch the input signal, see page 38 "Projecting an Image".

   The list of DLNA servers is displayed.
3. **Select the server that has the files to be projected.**

   The list of files in the root directory is displayed.

   If [DLNA Certification Mode] in [Network Application Settings] is specified as [Enable], some video files do not appear in the file list. For details, see page 121 "Network Application Settings Menu".
4. **Select the file, [Slideshow], or folder, and then press the [Enter] button.**
   - When a file is selected

     If you select a JPEG file, its image is projected. If you select an MPEG file, the video plays.
   - When [Slideshow] is selected

     A slide show starts with the files in the current folder.
   - When a folder is selected

     The file list within the folder is displayed. Repeat this step until the file you want to project is displayed.

**Note**

- Images are displayed in the numerical and alphabetical order of their file name headers.
- You can specify the slide show switching interval for still images in [Display Interval (sec.)] in [Server] under [Network Application Settings].
- If a video file is in a folder that has been selected for a slide show, the entire video plays. When the video finishes, the next file is displayed.

## Controlling the projected image

### How to control a still image

- [Enter] button: Starts the slide show from the projected image. Stops the slide show that is in progress.
- [▶] button: Displays the next image.
- [◀] button: Displays the previous image.

- [▲] button: Rotates the image 90° to the right.
- [▼] button: Rotates the image 90° to the left.
- [Menu] button: Returns to the file list screen.

**How to control a video**

- [Enter] button: Pauses or restarts the video.
- [▶] button: Fast forwards the video. If a video is paused, displays the next image.
- [◀] button: Rewinds the video. If a video is paused, displays the previous image.
- [▲] button: Increases the volume.
- [▼] button: Decreases the volume.
- [Menu] button: Returns to the file list screen.



**Note**

- The rewind and fast forward speed increases three levels each time the button is pressed. To reduce the speed to its original, press the [Enter] button.
- If any operation except for volume adjustment is performed during the slide show, the slide show stops.

# Projecting Images Using Smart Devices (RICOH PJ X3351N/WX3351N/WX4241N only)

The projector is compatible with Miracast. Using Miracast, the projector can be connected to your smart device peer-to-peer, and you can project the screen of your smart device on the projection screen.

**Note**

- For details about supported file types for this function, see page 80 "Projecting Images Using DLNA-Compatible Devices".

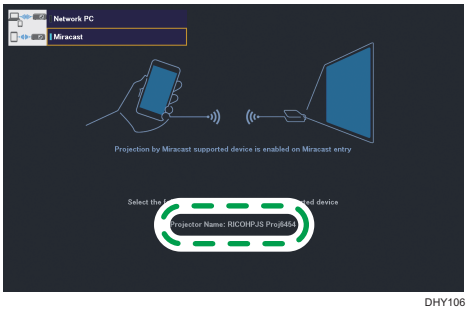
1. **Turn the projector on.**
2. **Press the [Input] button to switch the input signal to Miracast.**

   For details about how to switch the input signal, see page 38 "Projecting an Image".

   When the standby screen for [Network PC] input is displayed, you can also select [Miracast] at the upper left corner of the projection screen.

   The standby screen for [Miracast] input appears.
3. **Check the projector name on the projection screen.**

   DHY106
4. **On your smart device, enable the wireless output (Miracast) function.**
5. **On your smart device, select the projector name checked in Step 3 as the destination device.**
6. **If the Push button method is selected as the authentication method on your smart device, select [Connect] on the projection screen, and then press the [Enter] button. If the PIN code method is selected, enter the PIN code displayed on the projection screen into your smart device.**
7. **On your smart device, select the file you want to project.**

   The selected file is projected.

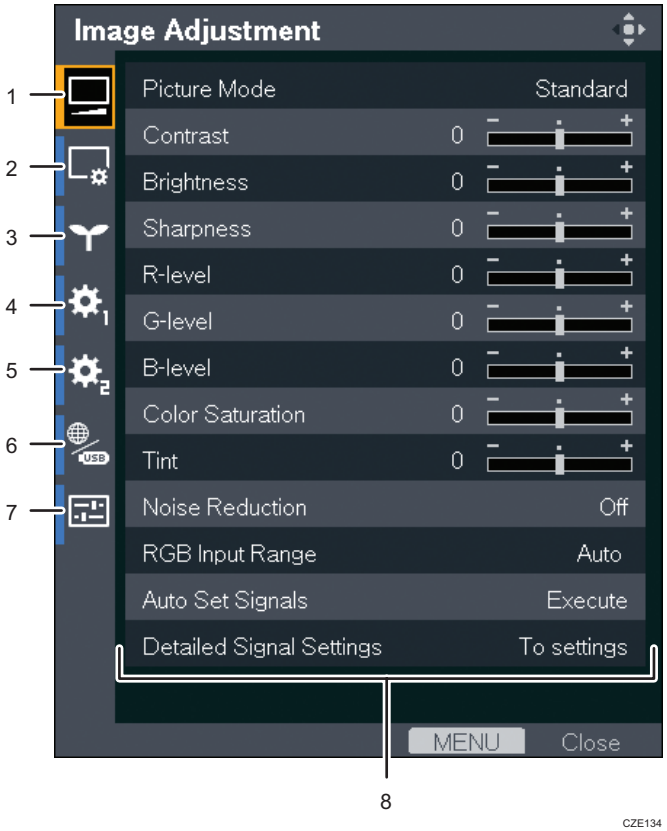
**Note**

- For details about how to control the projected image and stop the projection, see the manuals provided with your smart device.

# 5. Changing the Projector Settings

This chapter explains the settings on the menu screen and how to change the settings.

## Viewing the Menu Screen




1. **Image Adjustment menu tab**

   Adjusts the settings for the projected image, such as contrast and brightness.

   For the Image Adjustment menu settings, see page 93 "Image Adjustment Menu".

2. **Display Settings menu tab**

   Specifies the settings for how to display the image, such as auto keystone correction and aspect.

   For the Display Settings menu settings, see page 97 "Display Settings Menu".

3. **Energy Saving Settings menu tab**

   Specifies the settings for energy saving.

   For the Energy Saving Settings menu settings, see page 102 "Energy Saving Settings Menu".

4. **Default Settings 1 menu tab**

   Specifies the settings for the beep sound, user logo, etc.

   For the Default Settings 1 menu settings, see page 105 "Default Settings 1 Menu".

5. **Default Settings 2 menu tab**

   Specifies the settings for the display language, startup password, etc.

   For the Default Settings 2 menu settings, see page 107 "Default Settings 2 Menu".

6. **Network/USB Settings menu tab**

   The Network/USB Settings menu tab includes the USB Settings menu, Network Settings menu, and Network Application Settings menu.

   - USB Settings menu

     Specify the settings for USB file projection.

     For the USB Settings menu settings, see page 110 "USB Settings Menu".

   - Network Settings menu

     Specify the network settings, such as an IP address.

     For the Network Settings menu settings, see page 112 "Network Settings Menu".

   - Network Application Settings menu

     Specify the settings for Web Image Monitor, PJLink, etc.

     For the Network Application Settings menu settings, see page 121 "Network Application Settings Menu".

7. **Display Status tab**

   Enables information such as input signals and lamp usage time, etc., to be displayed.

   For item that can be displayed, see page 128 "Display Status".

8. **Settings**

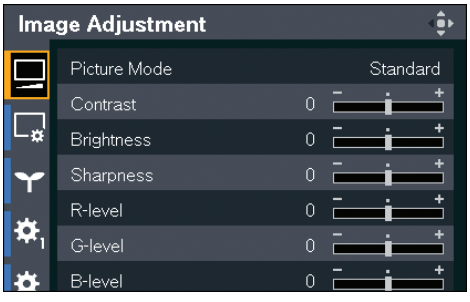
   The settings and information for each menu can be displayed.

# Changing the Settings

1. **Press the [Menu] button.**




2. **Select the menu tab using the [▲] and [▼] buttons.**




If you select the Display Status tab, you can confirm the information in this step.

3. **Press the [▶] button.**
4. **Select the item to be changed using the [▲] and [▼] buttons.**
5. **Press the [Enter] button.**

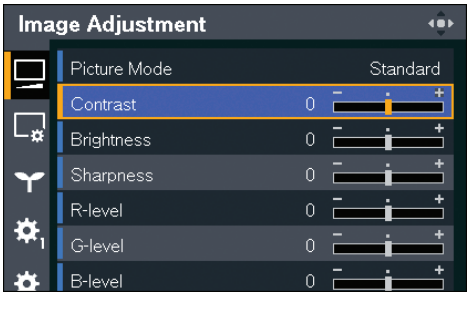
If [To settings] is displayed on the right, the item has a submenu. Select an item on the submenu, and then press the [Enter] button.

If [Execute] is displayed to the right of the item you select, the function is executed in this step.

6. **Change the settings.**

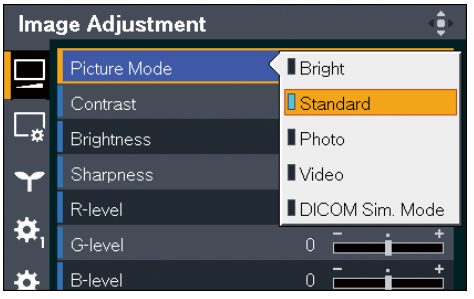
- Adjusting values using the values bar

  Change the value using the [◀] and [▶] buttons, and then press the [Enter] button.



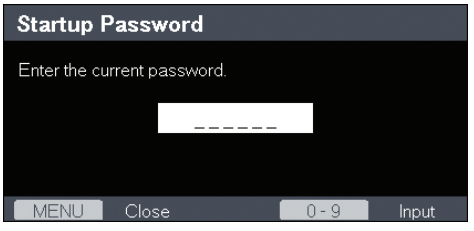

- Selecting the value from a list

  Change the value using the [▲], [▼], [◀], and [▶] buttons, and then press the [Enter] button.




- Inputting numbers

  Use the number buttons on the remote control to input numbers.




- Inputting text

  Use the keyboard that is displayed on screen to input text. You can also use the number buttons on the remote control to input numbers.




7. **If a confirmation screen appears, select [OK], and then press the [Enter] button.**
8. **Press the [Menu] button.**
9. **If a confirmation screen appears, select [Reflect], and then press the [Enter] button.**

**Note**

- The control panel on the projector can be used for operations, but numbers for settings cannot be inputted.
- The Network/USB Settings menu tab includes the USB Settings menu, Network Settings menu, and Network Application Settings menu. Open the menu according to the settings you want to change, and then go to Step 2 to change the settings.
- The menu screen closes automatically 30 seconds after the last operation. Changes to the settings are automatically applied when you close the menu screen. You do not need to press the [Enter] button.

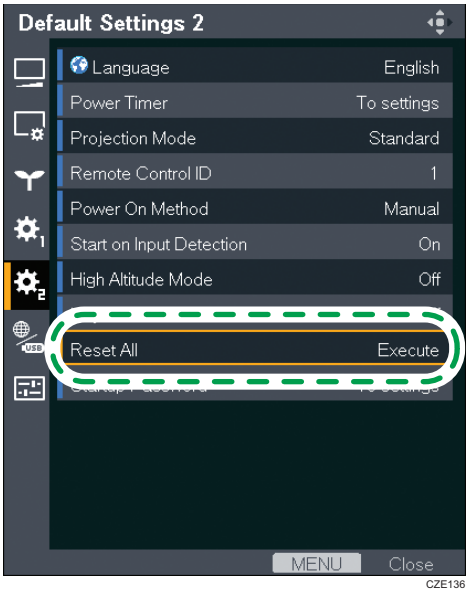
- Settings in the Network/USB Settings menu are not applied until you select [Reflect] on the confirmation screen.
- To access the menu screen while projecting images from a USB memory device or server, press the [Menu] button to stop projecting images, and then press the [Menu] button again.

# Restoring All the Settings to Their Defaults

1. **Press the [Menu] button.**




2. **Select [Default Settings 2], and then press the [▶] button.**
3. **Select [Reset All], and then press the [Enter] button.**




CZE136

4. **Select [OK] in the confirmation screen, and then press the [Enter] button.**

**Note**

- The start menu is displayed after [Reset All] is executed. For details about the start menu, see page 38 "When the start menu is displayed".
- The user logo, some of the passwords, and the network security settings cannot be reset with this function.
  To reset the registered user logo, select [Reset Logo] in [Default Settings 1].
  To reset the network security settings, select [Reset Security Settings] in [Network Application Settings].
  To reset the [Startup Password] in [Default Setting 2] and [Administrator Password] in [Network Application Settings], contact your service representative.

# Image Adjustment Menu

| Item | Default |
|---|---|
| **Picture Mode**<br>Select the picture mode.<br>This function is not available when you select [On] in [3D Projection] under [Display Settings] or [On] in [Interactive Mode] under [Default Settings 1].<br>• Bright<br>This image mode makes it easier to see the projection in bright locations.<br>• Standard<br>This is the standard image mode.<br>• Photo<br>Photos appear more natural in this mode.<br>• Video<br>Video is smoother in this mode.<br>• DICOM Sim. Mode<br>In this image mode, the images are adjusted to simulate the DICOM format. DICOM is a global standard for storing and transmitting medical images. DICOM is used for computer tomography (CT), magnetic resonance imaging (MRI), and endoscope images. However, this mode only simulates these formats, so the image may be projected differently from the original DICOM format. Use this mode only for education. It should not be used for actual diagnoses. | **Standard** |
| **Contrast**<br>Adjust the image contrast. The greater the value, the stronger the image contrast. | 0 |
| **Brightness**<br>Adjust the image brightness. The greater the value, the brighter the image. | 0 |
| **Sharpness**<br>Adjust the sharpness of the image. The greater the value, the sharper the image. | 0 |

| Item | Default |
|---|---|
| **R-level**<br>Adjust the level of red in the image. The greater the value, the stronger the color red is in the image. | 0 |
| **G-level**<br>Adjust the level of green in the image. The greater the value, the stronger the color green is in the image. | 0 |
| **B-level**<br>Adjust the level of blue in the image. The greater the value, the stronger the color blue is in the image. | 0 |
| **Color Saturation**<br>Adjust the color saturation of the image. The greater the value, the richer the image.<br>This function is available when you select [Y/Pb/Pr] or [Video] as the input signal. | 0 |
| **Tint**<br>Adjust the tint of the image.<br>This function is available when you select [Y/Pb/Pr], [HDMI] (Y/Pb/Pr signals), or [Video] as the input signal. | 0 |
| **Noise Reduction**<br>Specify whether or not to use the function to reduce the Y/Pb/Pr (480i/576i) or video signal noise.<br>This function is available when you select [Y/Pb/Pr] (480i/576i) or [Video] as the input signal. | Off |

| Item | Default |
|---|---|
| **RGB Input Range**<br>Select the RGB input range.<br>This function is available when you select [HDMI] (RGB signals) as the input signal.<br>• Auto<br>The projector switches RGB input range according to the settings of the connected equipment.<br>• Standard<br>Select this mode when the color black in the image is light.<br>• Full<br>Select this mode when dark parts in the image are too dark. | Auto |
| **Auto Set Signals**<br>Automatically adjust the items in [Detailed Signal Settings].<br>This function is available when you select [Computer 1] or [Computer 2] as the input signal. | - |
| **Detailed Signal Settings > Phase**<br>Adjust to eliminate image flicker.<br>This function is available when you select [Computer 1] or [Computer 2] as the input signal. | 0 to 31*1 |
| **Detailed Signal Settings > Frequency**<br>Adjust to eliminate moiré patterns and flicker when you project images with thin vertical-stripes.<br>This function is available when you select [Computer 1] or [Computer 2] as the input signal. | 0 |
| **Detailed Signal Settings > H-position**<br>Adjust the horizontal position of the image.<br>This function is available when you select [Computer 1] or [Computer 2] as the input signal. | 0 |
| **Detailed Signal Settings > V-position**<br>Adjust the vertical position of the image.<br>This function is available when you select [Computer 1] or [Computer 2] as the input signal. | 0 |

| Item | Default |
|---|---|
| **Detailed Signal Settings > Clamp Pulse 1**<br>Adjust the clamp pulse position.<br>This function is available when you select [Computer 1] or [Computer 2] as the input signal. | 0 to 255*1 |
| **Detailed Signal Settings > Clamp Pulse 2**<br>Adjust the clamp pulse width.<br>This function is available when you select [Computer 1] or [Computer 2] as the input signal. | 0 to 255*1 |

*1 The default of [Phase], [Clamp Pulse 1], and [Clamp Pulse 2] is variable because the projector automatically adjusts these settings according to the input signal.

# Display Settings Menu

| Item | Default |
|---|---|
| **Auto Keystone (Vertical)**<br>Specify whether or not to implement vertical keystone correction automatically depending on the angle of the projector's position.<br>When [Auto Keystone (Vertical)] is enabled, [4-corner Correction] is disabled automatically and reset to its default. | On |
| **Keystone (Vertical)**<br>Adjust for vertical keystone distortion manually.<br>To decrease the length of the bottom of the projected image, decrease the value. To decrease the length of the top of the projected image, increase the value.<br>The setting range is between -40 and 40. However, the available range may vary depending on the Keystone (Horizontal) setting.<br>If you change this setting, [4-corner Correction] is disabled and reset to its default. | 0 |
| **Keystone (Horizontal)**<br>Adjust for horizontal keystone distortion manually.<br>To decrease the length of the left side of the projected image, decrease the value. To decrease the length of the right side of the projected image, increase the value.<br>The setting range is between -30 and 30. However, the available range may vary depending on the Keystone (Vertical) setting.<br>If you change this setting, [4-corner Correction] is disabled and reset to its default. | 0 |

| Item | Default |
|---|---|
| **4-corner Correction**<br>Move the four corners of the projected image, so that it fits into the screen.<br>Select the corner you want to move and increase or decrease the value until it fits into the screen.<br>When [4-corner Correction] is enabled, [Auto Keystone (Vertical)], [Keystone (Vertical)], [Keystone (Horizontal)] are disabled automatically and reset to their defaults.<br>When [4-corner Correction] is enabled, the [Zoom], [Aspect], and [Display Position] settings are not available.<br>If the projector is tilted horizontally and vertically at the same time, the projected image may be distorted.<br>In this case, do not use [4-corner Correction] but [Keystone (Vertical)] or [Keystone (Horizontal)] to adjust for distortion.<br>Unless otherwise required, tilt the projector either vertically or horizontally. | - |
| **Zoom**<br>Reduce the size of the image if the projected image is larger than the screen. The image can be reduced in a range of 80 to 100% using the digital zoom function.<br>When [4-corner Correction] is enabled, the setting is [100%] and cannot be changed. | 100% |

| Item | Default |
|---|---|
| **Aspect**<br>Select the aspect ratio of the image.<br>This function is not available when you select [USB Memory] or [Server] as the input signal. When you select [Network PC] or [Miracast] as the input signal, this function is available for the computer or smartphone screen you project.<br>When [4-corner Correction] is enabled, the setting is [Normal] and cannot be changed.<br>• Normal<br>Display in full screen without changing the input signal aspect ratio.<br>• 16:9<br>Display using 16:9 aspect ratio.<br>• RICOH PJ X3351N/X4241N: 1024 × 576 resolution<br>• RICOH PJ WX3351N/WX4241N: 1280 × 720 resolution<br>• Full<br>Display using full size resolution.<br>• RICOH PJ X3351N/X4241N: 1024 × 768 resolution<br>• RICOH PJ WX3351N/WX4241N: 1280 × 800 resolution<br>• Native<br>Display the image without changing the resolution of the input signal.<br>This setting is not available when you select [Y/Pb/Pr], [HDMI] (Y/Pb/Pr signals), [Video], [USB Memory], or [Server]. When you select [Computer 1], [Computer 2], [HDMI] (RGB signals) as the input signal, this setting is not available if the horizontal resolution of the image is 1920.<br>• Zoom (RICOH PJ WX3351N/WX4241N only)<br>Display the image width as the projection screen width while maintaining the input signal aspect ratio. | **Normal** |

| Item | Default |
|---|---|
| **Display Position**<br>Move the image if the projected image is smaller or larger than the screen size. You can move the image using the [▲], [▼], [◀], and [▶] buttons.<br>This function is not available when you select [Network PC], [USB Memory], [Server], or [Miracast] as the input signal.<br>When [4-corner Correction] is enabled, the display position is initialized and cannot be changed. | - |
| **Wall Color Mode**<br>Select the image hue according to the projection surface when the image is being projected on something other than a screen.<br>• Off<br>• Whiteboard<br>• Beige<br>• Gray<br>• Blackboard (Green) | Off |
| **3D Projection > 3D Projection**<br>Specify whether or not to use 3D projection.<br>The image will be slightly darker if this is set to [On].<br>3D projection and interactive mode cannot be enabled simultaneously. If you change this setting to [On], [Interactive Mode] in [Default Settings 1] is switched to [Off], and the projector operates with the lamp power maximum and Image Eco disabled. | Off |
| **3D Projection > L/R Reverse**<br>Specify whether or not to reverse left and right in a 3D image.<br>• Normal<br>• Reverse | Normal |

| Item | Default |
|---|---|
| **3D Projection > 3D Format**<br>Select a 3D format.<br>Select [Auto] when the 3D signals are input through HDMI. If the image does not project in 3D even if [Auto] is selected, change the setting to match the 3D format of the signal being input.<br>• Auto<br>• Frame Sequential<br>• Side by Side<br>• Top and Bottom<br>• Frame Packing | Auto |
| **Closed Caption**<br>The projector supports closed captioning, which allows subtitles to be displayed at the bottom of the picture. This is pursuant to the regulations set forth by the US Federal Communications Commission (FCC).<br>Select [CC-1] to [CC-4] to display the dialogue and narration of TV programs and videos that are closed captioned.<br>This function is available when you select [Video] as the input signal.<br>• Off<br>• CC-1<br>• CC-2<br>• CC-3<br>• CC-4 | Off |

# Energy Saving Settings Menu

| Item | Default |
|---|---|
| **Eco Mode**<br>Specify the lamp settings to save energy or to make images brighter.<br>• On (Auto)<br>Select this mode to save energy. In this mode, the following settings are automatically specified:<br>• Lamp Power: [Auto]<br>• Lamp Pwr on No Signal: [Eco]<br>• Image Eco: [On]<br>• On (Detailed)<br>You can specify [Lamp Power], [Lamp Pwr on No Signal], and [Image Eco] manually.<br>• Off<br>Select this mode to make images brighter. In this mode, the following settings are automatically specified:<br>• Lamp Power: [Maximum]<br>• Lamp Pwr on No Signal: [Std.]<br>• Image Eco: [Off] | **On (Auto)** |

| Item | Default |
|---|---|
| **Lamp Power**<br>This setting is available when [Eco Mode] is set to [On (Detailed)].<br>Select the lamp power level.<br>[Auto] is selectable when you select [Standard] or [Rear] in [Projection Mode] under [Default Settings 2]. If you select [Auto], the lamp power level switches automatically depending on the brightness of the projecting location. Make sure that the illuminance sensor on the top of the projector is not blocked. This function may not work correctly depending on the positioning of the projector.<br>When you select [Maximum], the image is brightest but the power consumption is highest. When you select [Low], the power consumption is lowest but the image brightness is lowest.<br>The lamp power reaches maximum regardless of this setting when [DICOM Sim. Mode], [3D Projection], or [Interactive Mode] is enabled.<br>• Auto<br>• Maximum<br>• High<br>• Medium<br>• Low | Auto |
| **Lamp Pwr on No Signal**<br>This setting is available when [Eco Mode] is set to [On (Detailed)].<br>Specify whether or not to lower the lamp power when there is no input signal. If you select [Eco], the projector lowers the lamp power 30 seconds after the input signal disappears.<br>• Eco<br>• Std. | Eco |
| **Image Eco**<br>This setting is available when [Eco Mode] is set to [On (Detailed)].<br>Specify whether or not to switch the lamp power automatically depending on the brightness of the image.<br>This function does not work when [DICOM Sim. Mode], [3D Projection], or [Interactive Mode] is enabled. | On |

| Item | Default |
|---|---|
| **Power Off on No Signal**<br>Select the amount of time from the last input signal or operation until the projector enters standby mode.<br>• Off<br>• 5 min.<br>• 10 min.<br>• 20 min.<br>• 30 min. | **20 min.** |
| **Power on Standby**<br>Specify whether or not to save energy while in standby.<br>• Eco<br>You can save energy while in standby, but start-up time is slower.<br>• Q'ck On<br>You can turn on the projector quickly, and the projector starts projection automatically if the image signals are input even while in standby. However, the standby energy level is higher. | **Eco** |
| **NW Settings on Standby**<br>Select a network function to be enabled while in standby. You can save energy by disabling the network function.<br>This function is available when you select [Eco] in [Power on Standby].<br>• Do not Use<br>Disable the wired LAN and the wireless LAN while in standby to save energy. To use the wired LAN or the wireless LAN, press the [Power] button to turn on the projector.<br>• Wired LAN<br>You can turn on the projector from standby mode via a wired LAN.<br>• Wired/Wireless LAN (RICOH PJ X3351N/WX3351N/WX4241N only)<br>You can turn on the projector from standby mode via a wired LAN or wireless LAN. | **Wired LAN** |

# Default Settings 1 Menu

| Item | Default |
|---|---|
| **Auto Input Search**<br>Specify whether or not to switch to another input signal that the projector detects when you press the [Input] button. Always select the [Server] and [Miracast] input signals manually even if this setting is [On]. | **On** |
| **Computer 2 Terminal**<br>Select the purpose of Computer2 In/Monitor Out port.<br>• Input<br>You can use Computer2 In/Monitor Out port for inputting RGB signals.<br>• Output<br>You can use Computer2 In/Monitor Out port for outputting RGB signals and Y/Pb/Pr signals. | **Input** |
| **Beep**<br>Specify whether or not to beep during use. | **On** |
| **Background on No Signal**<br>Select the image display when there is no input signal.<br>• Logo<br>• Blue<br>• None | **Logo** |
| **Display Guidance**<br>Specify whether or not to display the guidance for operating the projector. | **On** |
| **Start-up Screen**<br>Specify whether or not to display the start-up screen when the projector is turned on. | **On** |

| Item | Default |
|---|---|
| **User Logo > Register Logo**<br>Register a user logo. Project the image to be registered as a user logo, and then execute this function. User logos can be displayed in the start-up screen or as the background when there are no input signals.<br>User logos can be registered up to the following resolutions:<br>• RICOH PJ X3351N/X4241N: 1024 × 768 pixels<br>• RICOH PJ WX3351N/WX4241N: 1280 × 800 pixels<br>This function is available when you select [Computer 1], [Computer 2], or [HDMI] (RGB signals) as the input signal. When you select [Network PC] or [Miracast] as the input signal, this function is available for the computer or smartphone screen you project. | - |
| **User Logo > Confirm Logo**<br>Display the registered user logo. | - |
| **User Logo > Reset Logo**<br>Delete the registered user logo. | - |
| **Interactive > Interactive Mode**<br>When the interactive kit is connected to the projector, you can specify whether or not to enable the interactive mode. For details about the interactive mode, see the manual provided with the interactive kit.<br>Interactive mode and 3D projection or Image Eco cannot be enabled simultaneously. If you change this setting to [On], [3D Projection] in [Display Settings] is switched to [Off], and the projector operates with the lamp power maximum and Image Eco disabled. | **Off** |
| **Interactive > PC Adapter Registration**<br>Register the computer USB adapter to the projector to use the interactive mode. For details about how to register the computer USB adapter, see the manual provided with the interactive kit.<br>This function is not available when you select [Video] as the input signal. | - |
| **Auto Focus (RICOH PJ X3351N/WX3351N only)**<br>Specify whether or not to enable the automatic focus function. | **On** |

# Default Settings 2 Menu

| Item | Default |
|---|---|
| **Language**<br>Select the display language.<br>Available languages are as follows:<br>English, Japanese, Spanish, Russian, French, Portuguese, German, Italian, Dutch, Polish, Czech, Swedish, Finnish, Hungarian, Norwegian, Danish, Romanian, Greek, Turkish, Arabic, Thai, Indonesian, Traditional Chinese. | **English** |
| **Projection Mode**<br>Select the projection method according to how the projector is positioned.<br>When you select [Ceiling] or [Rear Ceiling], you cannot select [Auto] in [Lamp Power] under [Energy Saving Settings].<br>If you change this setting to [Ceiling] or [Rear Ceiling] when [Lamp Power] is [Auto], [Lamp Power] is switched to [Maximum].<br>If you change this setting to [Standard] or [Rear] when [Lamp Power] is [Maximum], [Lamp Power] is switched to [Auto].<br>• Standard<br>Select this mode when the projector is placed in front of a screen.<br>• Rear<br>Select this mode when the projector is placed behind a screen.<br>• Ceiling<br>Select this mode when the projector is mounted on the ceiling in front of a screen.<br>• Rear Ceiling<br>Select this mode when the projector is mounted on the ceiling behind a screen. | Standard |

| Item | Default |
|---|---|
| **Remote Control ID**<br>Select the projector remote control ID. Specify the ID for each projector when operating multiple projectors using one remote control.<br>• 1<br>• 2<br>• 3<br>• 4 | 1 |
| **Direct Power On**<br>Select the power on method of the projector.<br>• On<br>Automatically turn on the projector when the power cord is connected.<br>• Off<br>Turn the projector on when the [Power] button is pressed. | Off |
| **High Altitude Mode**<br>The number of fan rotations is high when set to [On]. The air is thin at high elevations, so the cooling efficiency of the projector is reduced. Select [On] when using the projector at an altitude of more than 1,500 meters (4,921 feet). Do not select [On] when the altitude is less than 1,500 meters (4,921 feet). | Off |
| **Key Lock**<br>Specify whether or not to lock the buttons on the control panel. You can change this setting to [Off] by pressing the [AV Mute] button on the projector's control panel for 10 seconds. | Off |
| **Current Time > Date/Time**<br>Specify the current date and time. | - |
| **Current Time > Time Zone**<br>Specify the time zone of the location where the projector is used by selecting the time difference to UTC (Coordinated Universal Time). | +0:00 |

| Item | Default |
|---|---|
| **Power Timer > Timer Projection**<br>Specify whether or not to enable the power timer function.<br>When you enable this function, the projector automatically starts projection and turns off at the specified time. If you select [On], specify [Projection Day] and [Projection Time] to enable this function. | Off |
| **Power Timer > Projection Day**<br>Select a day of the week to start projecting using the power time function. | (Not programmed) |
| **Power Timer > Projection Time**<br>Specify the time to start and end projecting using the power timer function. An interval of at least ten minutes is required between the startup time and the end time. | (Not programmed) |
| **Startup Password > Register Password**<br>Enter a 6-digit password. The current password is required to change the password. | 000000 |
| **Startup Password > Password Protect**<br>Specify whether or not to enter a password when the projector is turned on. If this is selected, a password must be entered when the projector is turned on after the power cord has been unplugged. However, a password is not required when turning the projector on from the standby mode.<br>A password is required to change this setting. | Off |
| **Reset All**<br>Reset all menus to their defaults.<br>This function cannot restore the default settings of [User Logo] in [Default Settings 1], [Startup Password] in [Default Settings 2], the network security settings that are reset by executing [Reset Security Settings] in [Network Application Settings], and [Administrator Password] in [Network Application Settings]. | - |

# USB Settings Menu

This section explains the items in USB Settings menu under the Network/USB Settings menu tab.

You can also specify and check the items in the USB Settings menu using Web Image Monitor. However, the following items are available only on the menu screen.

- [Remove USB Mem.] in [Settings]
- [USB Memory Free Space (KB)] and [USB Memory Access Status] in [Display Status]

On Web Image Monitor, you can check [Network/USB Func. Firmware Version] on the top page.

For details about Web Image Monitor, see page 154 "Managing the Projector Using Web Image Monitor".

## Settings



### Still Image

| Item | Default |
|---|---|
| **Display Effect**<br>Select the display effect for switching the image.<br>• None<br>• Push<br>The current image is pushed off by the next image.<br>• Wipe<br>The current image is wiped off by the next image.<br>• Fade<br>The current image fades out and the next image fades in. | None |
| **Display Interval (sec.)**<br>Enter the slide show switching interval from 5 to 999 seconds. | 5 seconds |

### Moving Image

| Item | Default |
|---|---|
| **Repeat**<br>Specify whether or not to repeat video playback. | Off |

### Common

| Item | Default |
|---|---|
| **Auto Start Slideshow**<br>Specify whether or not to start a slide show automatically when the projector is connected to the USB device. | Off |
| **Remove USB Mem.**<br>The USB device can be removed when this command is executed. | - |

## Display Status

### USB Memory

| Item | Default |
|---|---|
| **USB Memory Free Space (KB)**<br>Display the space available on the USB device (Displayed in KB). | - |
| **USB Memory Access Status**<br>Display whether or not the USB device can be accessed. | - |

### Firmware Version

| Item | Default |
|---|---|
| **Network/USB Func. Firmware Version**<br>Display the firmware version of the network and USB functions. | - |

# Network Settings Menu

This section explains the items in Network Settings menu under the Network/USB Settings menu tab.

You can also specify and check the items in the Network Settings menu using Web Image Monitor. However, the following items are available only on the menu screen.

- [Simple Wireless LAN Setup], [EAP Type], [Import Client Certificate], [Client Certificate User Name], [Client Certificate List], [Import CA Certificate], [CA Certificate List], [Delete Client/CA Certificate], [MS-CHAP v2 User Name], [MS-CHAP v2 Password], [Windows Domain Name], [Server Certificate Authentication], [Intermediate CA Permission], [WPA/WPA2-EAP Connection Check], and [Reset Wireless LAN Settings] in [Wireless LAN]
- [Network Setting Wizard] in [Setup Wizard]

On Web Image Monitor, you can check [Network/USB Func. Firmware Version] on the top page.

For details about Web Image Monitor, see page 154 "Managing the Projector Using Web Image Monitor".



## Wired LAN

### Wired LAN Settings

| Item | Default |
|---|---|
| **Wired LAN**<br>Specify whether to enable or disable wired LAN. | **Enable** |
| **Transmission Speed**<br>Select a wired LAN speed that matches your network environment. It is recommended that [Auto-Negotiation] be selected.<br>• Auto-Negotiation<br>• 10BASE-T Full Duplex<br>• 10BASE-T Half Duplex<br>• 100BASE-TX Full Duplex<br>• 100BASE-TX Half Duplex | **Auto-Negotiation** |

### TCP/IP Settings

| Item | Default |
|---|---|
| **DHCP**<br>Specify whether to enable or disable DHCP.<br>The IP address is allocated automatically from the DHCP server when [Enable] is selected. When [Disable] is selected, enter the IP address, subnet mask, and default gateway manually. | **Enable** |
| **IP Address**<br>Enter the projector's IP address. | 0.0.0.0 |
| **Subnet Mask**<br>Enter the subnet mask. | 0.0.0.0 |
| **Default Gateway**<br>Enter the default gateway. | 0.0.0.0 |

## Wireless LAN (RICOH PJ X3351N/WX3351N/WX4241N only)

### Simple Settings

| Item | Default |
|---|---|
| **Simple Wireless LAN Setup**<br>Acquire the wireless LAN settings registered in the access point, and specify infrastructure mode wireless LAN settings for the projector automatically.<br>This function may not work depending on the access point. | - |

### Wireless LAN Settings

| Item | Default |
|---|---|
| **Wireless LAN**<br>Specify whether to enable or disable wireless LAN. | **Enable** |

| Item | Default |
|---|---|
| **Communication Mode**<br>Select the wireless LAN communication mode.<br>• Infrastructure<br>Select this mode when you want to connect the projector to a wireless LAN network. You need to specify [SSID] and items in [Security] and [TCP/IP Settings] in this mode.<br>• Adhoc<br>Select this mode when you want to connect the projector and the computer directly. The projector specifies [SSID] and items in [Security] and [TCP/IP Settings] automatically in this mode. | **Adhoc** |
| **SSID**<br>Enter the SSID to connect to a wireless LAN network when [Infrastructure] is selected. Enter up to 32 characters. | (blank) |
| **Channel**<br>Select the channel to use when [Adhoc] is selected.<br>Select the channel that matches the type of wireless LAN being used.<br>The channels available might differ depending on the country.<br>• 2.4 GHz: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 | **11** |

**TCP/IP Settings**

| Item | Default |
|---|---|
| **DHCP**<br>Specify whether to enable or disable DHCP.<br>The IP address is allocated automatically from the DHCP server when [Enable] is selected. If you select [Disable], manually enter the IP address, subnet mask, and default gateway. | **Enable** |
| **IP Address**<br>Enter the projector's IP address. | **0.0.0.0** |
| **Subnet Mask**<br>Enter the subnet mask. | **0.0.0.0** |

| Item | Default |
|---|---|
| **Default Gateway**<br>Enter the default gateway. | 0.0.0.0 |

**Security**

| Item | Default |
|---|---|
| **Authentication Method**<br>Select the wireless LAN authentication method.<br>• Open System<br>• WEP Shared Key<br>• WPA/WPA2-PSK<br>• WPA2-PSK<br>• WPA/WPA2-EAP<br>• WPA2-EAP | **Open System** |
| **Encryption Method**<br>Select the wireless LAN encryption method.<br>• No Encryption<br>Communication is not encrypted. You can select [No Encryption] if you select [Open System] in [Authentication Method].<br>• WEP<br>You can select [WEP] if you select [Open System] in [Authentication Method].<br>[WEP] is selected automatically when you select [WEP Shared Key] in [Authentication Method].<br>• TKIP/CCMP<br>[TKIP/CCMP] is selected automatically when you select [WPA/WPA2-PSK] or [WPA/WPA2-EAP] in [Authentication Method].<br>• CCMP<br>[CCMP] is selected automatically when you select [WPA2-PSK] or [WPA2-EAP] in [Authentication Method]. | **No Encryption** |

| Item | Default |
|---|---|
| **Transmission WEP Key Number**<br>Select the Key number used to authenticate and encrypt transmissions when you select [WEP] in [Encryption Method].<br>• 1<br>• 2<br>• 3<br>• 4 | 1 |
| **Network Key**<br>Enter the WEP key when you select [Open System] or [WEP Shared Key] in [Authentication Method] and select [WEP] in [Encryption Method].<br>When using 64 bit WEP, up to 10 characters can be used for hexadecimal and up to 5 characters for ASCII. When using 128 bit WEP, up to 26 characters can be used for hexadecimal and up to 13 characters for ASCII.<br>Enter PSK when [WPA/WPA2-PSK] or [WPA2-PSK] is selected in [Authentication Method].<br>When using a PSK, up to 64 characters can be used for hexadecimal and 8 to 63 characters for ASCII. | (blank) |
| **EAP Type**<br>Specify the WPA/WPA2-EAP type when [WPA/WPA2-EAP] or [WPA2-EAP] is selected in [Authentication Method]. You can select EAP-TLS or EAP-PEAP.<br>• EAP-TLS<br>A client certificate and a CA certificate must be imported to the projector.<br>• EAP-PEAP<br>A CA certificate must be imported to the projector. | EAP-TLS |
| **Import Client Certificate**<br>Imports the client certificate used for WPA/WPA2-EAP or WPA2-EAP when [EAP-TLS] is selected in [EAP Type]. | - |

| Item | Default |
|---|---|
| **Client Certificate User Name**<br>Enter the client certificate user name used for WPA/WPA2-EAP or WPA2-EAP when [EAP-TLS] is selected in [EAP Type].<br>This setting is optional. If it is blank, the default value of the certificate will be used to decrypt the certificate. | (blank) |
| **Client Certificate List**<br>Displays a list of imported client certificates. | - |
| **Import CA Certificate**<br>Imports a CA certificate when [WPA/WPA2-EAP] or [WPA2-EAP] is selected in [Authentication Method]. | - |
| **CA Certificate List**<br>Displays a list of imported CA certificates. | - |
| **Delete Client/CA Certificate**<br>Deletes all imported client and CA certificates. | - |
| **MS-CHAP v2 User Name**<br>Enter the MS-CHAP v2 user name when [EAP-PEAP] is selected in [EAP Type]. You can enter up to 31 characters including spaces. | (blank) |
| **MS-CHAP v2 Password**<br>Enter the MS-CHAP v2 password when [EAP-PEAP] is selected in [EAP Type]. You can enter up to 128 characters including spaces. | (blank) |
| **Windows Domain Name**<br>Enter the Windows domain name when [EAP-PEAP] is selected in [EAP Type]. You can enter up to 64 characters including spaces. "@" and backslashes cannot be used. | (blank) |
| **Server Certificate Authentication**<br>Specify whether to enable or disable server certificate authentication. | Enable |
| **Intermediate CA Permission**<br>Specify whether to enable or disable intermediate CA permission. | Enable |
| **WPA/WPA2-EAP Connection Check**<br>Checks the WPA/WPA2-EAP connection. | - |

### Reset Wireless LAN Settings

| Item | Default |
|---|---|
| **Reset Wireless LAN Settings**<br>The following wireless LAN settings are reset to their defaults: Communication Mode, SSID, Channel, Authentication Method, Encryption Method, Transmission WEP Key Number, Network Key, DHCP, IP Address, Subnet Mask, Default Gateway. | - |

## LAN Common

Specify the wired LAN and wireless LAN settings.



### Preferred Default Gateway (RICOH PJ X3351N/WX3351N/WX4241N)

| Item | Default |
|---|---|
| **Preferred Default Gateway**<br>Select the network interface for the projector that is connected to both wired and wireless LAN.<br>• Wired LAN<br>• Wireless LAN | **Wired LAN** |

### DNS Settings

| Item | Default |
|---|---|
| **Host Name**<br>Display the projector's host name.<br>The [Projector Name] in [Projector ID] is used as the projector's host name. | - |
| **Domain Name**<br>Enter the projector's domain name. Enter up to 63 characters. | (blank) |

### Projector Search Settings

| Item | Default |
|---|---|
| **Projector Search**<br>Specify whether or not to search for the projector automatically when the projector and the device connected to the projector are on the same network. | **Enable** |

### HTTP Server Settings

| Item | Default |
|---|---|
| **HTTP Port**<br>Enter an HTTP port that is between 1 and 65535. | **80** |



## Projector ID

| Item | Default |
|---|---|
| **Projector Name**<br>Enter an ID to identify the projector on the network. Enter up to 16 characters. You can use alphanumeric characters, hyphens, and periods for projector names. Only a letter can be used for the first character of the projector's name. Hyphens and periods cannot be entered consecutively and cannot be used for the last character of the projector's name. | **RPJxxxxxx***1 |
| **Identification Code**<br>Enter the 4-digit identification code for connecting the projector and the computer using QuickProjection. | **0000 to 9999***2 |

*1 xxxxxx is the last six digits of the wired LAN's MAC address.

*2 Each projector has a unique identification code as the default setting.

## Setup Wizard

| Item | Default |
|---|---|
| **Network Setting Wizard**<br>Open Network Setting Wizard. For details about Network Setting Wizard, see page 70 "Connecting the Projector to a Network". | - |

## Display Status

### Wired LAN

| Item | Default |
|---|---|
| Current wired LAN settings are displayed. You can confirm the following items:<br>Connection Status, MAC Address, Transmission Speed, IP Address, Subnet Mask, Default Gateway | - |

### Wireless LAN (RICOH PJ X3351N/WX3351N/WX4241N only)

| Item | Default |
|---|---|
| Current wireless LAN settings are displayed. You can confirm the following items:<br>Connection Status, Radio Field Intensity, MAC Address, Access Point BSSID, Communication Mode, Transmission Speed, Channel, SSID, Authentication Method, Encryption Method, IP Address, Subnet Mask, Default Gateway | - |

### Firmware Version

| Item | Default |
|---|---|
| **Network/USB Func. Firmware Version**<br>Display the firmware version of the network and USB functions. | - |

# Network Application Settings Menu

This section explains the items in the Network Application Settings menu under the Network/USB Settings menu tab.

You can also specify and check the items in the Network Application Settings menu using Web Image Monitor. However, the following items are available only on the menu screen.

- [Crestron WebUI User Auth.], [Crestron WebUI User Password], [Crestron WebUI Admin. Auth.], [Crestron WebUI Admin. Password], [Control System IP Address], [Control System IP ID], and [Control System Port] in [Administration Tools]
- [DLNA Certification Mode] in [Server]

  On Web Image Monitor, you can check [Network/USB Func. Firmware Version] on the top page.

  For details about Web Image Monitor, see page 154 "Managing the Projector Using Web Image Monitor".



## Administration Tools

### Web Image Monitor

| Item | Default |
|---|---|
| **Web Image Monitor**<br>Specify whether or not to allow the projector settings to be changed and checked using a web browser. To enable this setting, you must restart Web Image Monitor after making the change. For details about Web Image Monitor, see page 154 "Managing the Projector Using Web Image Monitor". | **Enable** |

### AMX Device Discovery

| Item | Default |
|---|---|
| **AMX Device Discovery**<br>Specify whether or not to allow the projector to be controlled and monitored by AMX Device Discovery. To use this function, an AMX controller is required in your network environment. For details about AMX Device Discovery, see the AMX LLC website. | **Disable** |

### Crestron RoomView

| Item | Default |
|---|---|
| **Crestron RoomView**<br>Specify whether or not to allow the projector to be controlled and monitored by Crestron RoomView. For details about Crestron RoomView, seepage 157 "Controlling and Monitoring the Projector Using Crestron RoomView". | **Disable** |
| **Crestron WebUI User Auth.**<br>Specify whether or not to restrict access to Crestron WebUI with a password. | **Off** |
| **Crestron WebUI User Password**<br>Enter the password for Crestron WebUI user authentication up to 26 characters. | (blank) |
| **Crestron WebUI Admin. Auth.**<br>Specify whether or not to restrict access to the tools screen on Crestron WebUI with a password. | **Off** |
| **Crestron WebUI Admin. Password**<br>Enter the password for Crestron WebUI administrator authentication up to 26 characters. | (blank) |
| **Control System IP Address**<br>Enter the IP address of Crestron Control System. | **0.0.0.0** |
| **Control System IP ID**<br>Enter the IP ID to connect to Crestron Control System. | **3** |
| **Control System Port**<br>Enter the port number for communicating to Crestron Control System. | **41794** |

### PJLink

| Item | Default |
|---|---|
| **PJLink Authentication**<br>Specify whether or not to set PJLink authentication. | **Off** |

| Item | Default |
| --- | --- |
| **PJLink Password**<br>Enter a password used when setting the PJLink authentication. Up to 32 alphanumeric characters can be used. | (blank) |

## Security

| Item | Default |
|---|---|
| **Administrator Authentication**<br>Specify whether or not to set administrator authentication. A administrator password is required to change this setting.<br>If administrator authentication is set, a password is required for the following operations:<br>**RICOH PJ X3351N/WX3351N/WX4241N**<br>• Changing [Transmission WEP Key Number], [Network Key], [EAP Type], [Client Certificate User Name], [MS-CHAP v2 User Name], [MS-CHAP v2 Password], [Windows Domain Name], [Server Certificate Authentication], [Intermediate CA Permission], [Crestron WebUI User Auth.], [Crestron WebUI User Password], [Crestron WebUI Admin. Auth.], [Crestron WebUI Admin. Password], [PJLink Authentication], and [PJLink Password]<br>• Using the simple wireless LAN setup function and Network Setting Wizard<br>• Importing, deleting, or displaying client or CA certificates<br>• Turning the projector on or off via a network<br>• Changing the settings using Web Image Monitor<br>• Executing [Reset Security Settings]<br>**RICOH PJ X4241N**<br>• Changing [Crestron WebUI User Auth.], [Crestron WebUI User Password], [Crestron WebUI Admin. Auth.], [Crestron WebUI Admin. Password], [PJLink Authentication], and [PJLink Password]<br>• Using Network Setting Wizard<br>• Turning the projector on or off via a network<br>• Changing the settings using Web Image Monitor<br>• Executing [Reset Security Settings] | Off |
| **Administrator Password**<br>Enter the administrator password. Up to 32 alphanumeric characters can be used. The current password is required to change the administrator password. | (blank) |

| Item | Default |
|---|---|
| **Application Authentication**<br>Specify whether to enable or disable Application Authentication. | **Off** |
| **Application Password**<br>Enter the password to be used for Application Authentication.<br>Up to 32 alphanumeric characters can be used. | (blank) |
| **Reset Security Settings**<br>Reset the values of the following settings protected by Administrator Authentication:<br>**RICOH PJ X3351N/WX3351N/WX4241N**<br>[Transmission WEP Key Number], [Network Key], [EAP Type], [Client Certificate User Name], [MS-CHAP v2 User Name], [MS-CHAP v2 Password], [Windows Domain Name], [Server Certificate Authentication], [Intermediate CA Permission], [Crestron WebUI User Auth.], [Crestron WebUI User Password], [Crestron WebUI Admin. Auth.], [Crestron WebUI Admin. Password], [PJLink Authentication], and [PJLink Password].<br>**RICOH PJ X4241N**<br>[Crestron WebUI User Auth.], [Crestron WebUI User Password], [Crestron WebUI Admin. Auth.], [Crestron WebUI Admin. Password], [PJLink Authentication], and [PJLink Password]. | - |

## Server

### Remote Projection Control

| Item | Default |
|---|---|
| **Remote Projection Control**<br>Specify whether or not to enable the Remote Projection Control function. The Remote Projection Control function allows you to project images from a tablet computer or a smartphone via a network.<br>For details about how to project images using this function, see page 80 "Projecting Images Using DLNA-Compatible Devices". | **Enable** |

### Still Image

| Item | Default |
|---|---|
| **Display Effect**<br>Select the display effect for switching the image.<br>• None<br>• Push<br>The current image is pushed off by the next image.<br>• Wipe<br>The current image is wiped off by the next image.<br>• Fade<br>The current image fades out and the next image fades in. | None |
| **Display Interval (sec.)**<br>Enter the slide show switching interval from 5 to 999 seconds. | 5 seconds |

### Moving Image

| Item | Default |
|---|---|
| **Repeat**<br>Specify whether or not to repeat video playback. | Off |
| **DLNA Certification Mode**<br>Specify whether the projector works as a DLNA-certified device. The projector is certified to DLNA 1.5 guidelines for still images. For details about the supported file types, see page 80 "Projecting Images Using DLNA-Compatible Devices".<br>• Enable<br>The projector works as a DLNA-certified device. Of the video files sent from the DLNA server, those files that are not DLNA compatible are shown on the file list of the Server Projection screen.<br>• Disable<br>The projector works according to its own specifications. It does not work as a DLNA-certified device. All the video files delivered from the DLNA server appear in the file list of the Server Projection screen. | Disable |

## Display Status

### PJLink

| Item | Default |
|---|---|
| **PJLink Class**<br>Display the PJLink class. | - |

### Firmware Version

| Item | Default |
|---|---|
| **Network/USB Func. Firmware Version**<br>Display the firmware version of the network and USB functions. | - |



## Administrator Authentication

| Item | Default |
|---|---|
| **Reset Administrator Password**<br>Reset the administrator password. | - |
| **Reset PJLink Password**<br>Reset the PJLink password. | - |

# Display Status

| Item |
| --- |
| **Input**<br>Displays the selected input signals. |
| **Resolution**<br>Displays the resolution.<br>This item appears when you select [Computer 1], [Computer 2], or [HDMI] (RGB signals) as the input signal. |
| **Frequency**<br>Displays the synchronous frequency.<br>This item appears when you select [Computer 1], [Computer 2], or [HDMI] (RGB signals) as the input signal. |
| **Sync**<br>Displays the synchronous signal polarity.<br>This item appears when you select [Computer 1] or [Computer 2] as the input signal. |
| **Signal Format**<br>Displays the Y/Pb/Pr signal format.<br>This item appears when you select [Y/Pb/Pr] or [HDMI] (Y/Pb/Pr signals) as the input signal. |
| **Video Mode**<br>Displays the video signal color format.<br>This item appears when you select [Video] as the input signal. |
| **Lamp Time**<br>Displays the lamp usage time. |
| **Lamp Reset Count**<br>Displays the number of lamp replacements. |
| **Total Time**<br>Displays the projector usage time. |
| **Total CO2 Reduction**<br>Displays the total reduction in $CO_2$ caused by setting the lamp to the eco mode. |

| Item |
| --- |
| **Eco Time Ratio**<br>Displays the ratio of the time eco mode was used to the total use time. |
| **Current Time**<br>Displays the current time specified in [Current Time] in [Default Settings 2]. |
| **Main FW Version**<br>Displays the version of the firmware on the main board. |
| **Interactive Version**<br>When the interactive kit is connected to the projector, the version of the interactive function is displayed. |

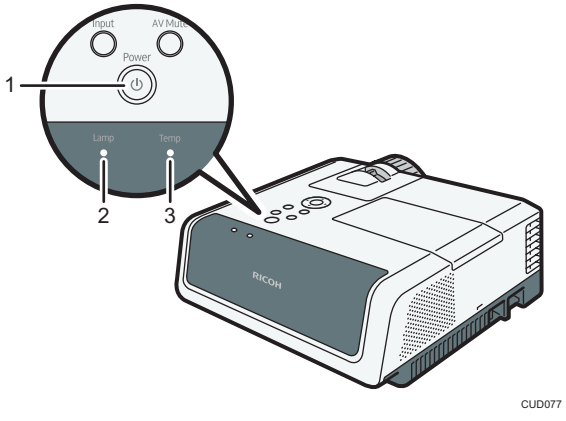
# 6. Troubleshooting

This chapter explains the basic problems and troubleshooting methods when an indicator light is lit.

## Indicator Display List

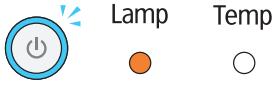
The projector uses the [Power] button, indicators, and beeps to notify you if a malfunction occurs. Check the indicator's status, and implement the following measures. "" in the table means the indicator is flashing.

**Indicator location**

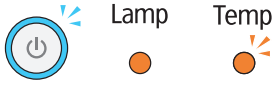



1. **[Power] button**
2. **Lamp indicator**
3. **Temp indicator**

| Status | Causes | Solutions |
|---|---|---|
| The projector does not turn on.<br>  | The projector has malfunctioned. | Disconnect the power cord, and contact your service representative. |

| Status | Causes | Solutions |
|---|---|---|
| "Hardware Error" was displayed, and the projector turned off during operation.<br>  <br>Flashing interval : 0.2 seconds | The projector has malfunctioned. | Disconnect the power cord, wait a while, and then turn on the projector again.<br>You can also press and hold the [Power] button on the remote control or the control panel for two seconds.<br>If the problem cannot be resolved, contact your service representative. |
| The lamp does not turn on.<br>  | • The lamp has overheated and cannot turn on.<br>• The lamp's service life has expired.<br>• The projector has malfunctioned. | • Disconnect the power cord, wait a while, and then turn on the projector again. You can also press and hold the [Power] button on the remote control or the control panel for two seconds.<br>• If the lamp burns out, replace it with a new lamp. For details of how to replace the lamp, see page 146 "Replacing the Lamp". |
| The lamp turned off during operation.<br>  <br>Flashing interval: 1 second | • The lamp's service life has expired.<br>• The projector has malfunctioned. | • Disconnect the power cord, wait a while, and then turn on the projector again. You can also press and hold the [Power] button on the remote control or the control panel for two seconds.<br>• If the lamp burns out, replace it with a new lamp. For details of how to replace the lamp, see page 146 "Replacing the Lamp". |

| Status | Causes | Solutions |
|---|---|---|
| The lamp does not turn on, turned off during operation, or it does not turn off.<br>  <br>Flashing interval: 0.2 seconds | The projector has malfunctioned. | Disconnect the power cord, wait a while, and then turn on the projector again.<br>You can also press and hold the [Power] button on the remote control or the control panel for two seconds.<br>If the problem cannot be resolved, contact your service representative. |
| The lamp turned off during operation, or it does not turn on.<br>  <br>Flashing interval: 1 second | The lamp cover is not installed correctly. | Disconnect the power cord, and reinstall the lamp cover correctly. For details of how to install the lamp cover, see page 146 "Replacing the Lamp". |
| "Temperature Error" was displayed, and the projector turned off during operation.<br>  <br>Flashing interval: 5 seconds | • The interior has overheated.<br>• The projector is being used in a high-temperature environment. | Place the projector so that the intake and exhaust vents are not blocked.<br>Disconnect the power cord, wait a while, and then turn on the projector again.<br>You can also press and hold the [Power] button on the remote control or the control panel for two seconds. |
| "Fan Error" was displayed, and the projector turned off during operation.<br>  <br>Flashing interval: 1 to 4 times in 5 seconds | The cooling fan in the projector has malfunctioned. | Disconnect the power cord, and contact your service representative. |

| Status | Causes | Solutions |
|---|---|---|
| The projector turned off during operation, or it does not turn on.<br>  <br><br>Flashing interval: 0.2 seconds | The projector has malfunctioned. | Disconnect the power cord, wait a while, and then turn on the projector again.<br>You can also press and hold the [Power] button on the remote control or the control panel for two seconds.<br>If the problem cannot be resolved, contact your service representative. |
| The lamp turned off during operation.<br>  <br><br>Flashing interval: 1 second | • The interior has overheated.<br>• The projector is being used in a high-temperature environment. | • Place the projector so that the intake and exhaust vents are not blocked.<br>• Disconnect the power cord, wait a while, and then turn on the projector again.<br>You can also press and hold the [Power] button on the remote control or the control panel for two seconds.<br>If the problem cannot be resolved, contact your service representative. |
| The lamp turned off during operation.<br>  <br><br>Flashing interval: 1 second | • The lamp's service life has expired. | • Disconnect the power cord, wait a while, and then turn on the projector again.<br>You can also press and hold the [Power] button on the remote control or the control panel for two seconds.<br>• If the lamp burns out, replace it with a new lamp. For details of how to replace the lamp, see page 127 "Replacing the Lamp". |

| Status | Causes | Solutions |
|---|---|---|
| The lamp does not turn on.<br>  <br>Flashing interval: 1 second | The projector has malfunctioned. | Disconnect the power cord, wait a while, and then turn on the projector again.<br>You can also press and hold the [Power] button on the remote control or the control panel for two seconds.<br>If the problem cannot be resolved, contact your service representative. |
| The lamp turned off during operation.<br>  <br>Flashing interval: 1 second | The projector has malfunctioned. | Disconnect the power cord, wait a while, and then turn on the projector again.<br>You can also press and hold the [Power] button on the remote control or the control panel for two seconds.<br>If the problem cannot be resolved, contact your service representative. |

# Common Problems

If you think a malfunction has occurred, check the following before contacting your service representative.

| Problem | Solutions |
|---|---|
| Power does not turn on. | • Make sure the power plug or connector is connected correctly.<br>• Make sure the lamp cover is mounted correctly. For details, see page 146 "Replacing the Lamp".<br>• When the projector is installed on a ceiling and lens-down, be sure to press the [Power] button and wait until the projector cooling process completes before disconnecting the power cord.<br>If you disconnect the power cord without pressing the [Power] button or the projector's power is turned off suddenly due to a power outage, you cannot turn the projector back on for up to approximately 25 minutes because it needs to release the internal heat. Wait until the projector cools down. |
| Power turns off during use. | • Make sure the environment in which the projector is being used is within the acceptable temperature range.<br>• Make sure the vents are not blocked. |

| Problem | Solutions |
|---|---|
| No image. | • Make sure the input signal is switched correctly if [Auto Input Search] in [Default Settings 1] is set to [Off]. For details, see page 105 "Default Settings 1 Menu".<br>• Make sure the AV mute function is not turned on. For details, see page 48 "Temporarily Blanking the Image and Muting the Audio".<br>• Check the settings of [Brightness] in [Image Adjustment]. For details, see page 93 "Image Adjustment Menu".<br>• Make sure the computer or AV equipment is connected to the projector correctly.<br>For details, see page 32 "Connecting Equipment to the Projector".<br>• Make sure the computer's image output is switched correctly. For details, see page 39 "When projecting the screen of a laptop computer".<br>• Make sure the computer or AV equipment is working properly. |
| No sound. | • Make sure the input signal is switched correctly if [Auto Input Search] in [Default Settings 1] is set to [Off]. For details about how to switch the input signal, see page 38 "Projecting an Image".<br>• Make sure the AV mute function is not turned on. For details, see page 48 "Temporarily Blanking the Image and Muting the Audio".<br>• Check the speaker's volume adjustment. For details, see page 47 "Adjusting the Volume of the Speaker".<br>• Make sure the computer or AV equipment is connected to the projector correctly. For details, see page 32 "Connecting Equipment to the Projector".<br>• Make sure the computer or AV equipment is working properly. |

| Problem | Solutions |
|---|---|
| Image is not projected normally. | • Make sure the input signal is compatible with the projector. For details, see page 166 "List of Compatible Signals".<br>• Check the status of the video tape or other video source.<br>• Execute [Auto Set Signals] in [Image Adjustment]. For details, see page 93 "Image Adjustment Menu".<br>• Check the settings of the computer's graphics driver. For details, see the manual provided with the computer. |
| Image is blurred.<br>Image is partially out of focus. | • Make sure the lens is clean. For details, see page 145 "Cleaning the Lens".<br>• Check the focus adjustment. For details, see page 44 "Adjusting the Focus".<br>• Make sure the projection distance is within the projector's range. For details, see page 29 "Relationship Between the Projection Distance and the Screen Size".<br>• Check the installation angles of the projector and screen. For details, see page 42 "Adjusting the Angle of the Projection".<br>• Check the settings of [Sharpness] and [Phase] in [Image Adjustment]. For details, see page 93 "Image Adjustment Menu". |
| Image is dark. | • Check the settings of [Brightness] and [Contrast] in [Image Adjustment]. For details, see page 93 "Image Adjustment Menu".<br>• Make sure the lamp is not near the end of its service life. For details, see page 128 "Display Status".<br>• Check the settings of [RGB Input Range] in [Image Adjustment]. For details, see page 93 "Image Adjustment Menu".<br>• Make sure [3D Projection] in [Display Settings] is set to [Off]. For details, see page 97 "Display Settings Menu". |

| Problem | Solutions |
|---|---|
| Color is faded.<br>Tint is poor. | • Check the settings of [Color Saturation], [R-level], [G-level], and [B-level] in [Image Adjustment]. For details, see page 93 "Image Adjustment Menu".<br>• Make sure the screen is clean.<br>• Check the settings of [Wall Color Mode] in [Display Settings]. For details, see page 97 "Display Settings Menu".<br>• Make sure the lamp is not near the end of its service life. For details, see page 128 "Display Status". |
| The projector's operation keys do not respond. | • Make sure [Key Lock] in [Default Settings 2] is not set to [On]. For details, see page 107 "Default Settings 2 Menu". |
| The remote control does not respond. | • Make sure the ID assigned to the remote control and in the settings of [Remote Control ID] in [Default Settings 2] are the same. For details, see page 107 "Default Settings 2 Menu".<br>• Make sure the batteries in the remote control are not dead.<br>• Make sure the batteries are correctly loaded into the remote control. For details, see page 24 "Loading Batteries into the Remote Control".<br>• Make sure the remote control is inside its effective range. For details, see page 23 "Effective Range of the Remote Control".<br>• Make sure there is nothing placed between the remote control and the projector.<br>• Make sure the remote control receiver is not exposed to strong light. |
| Display language is unknown. | • Press the [Menu] button, and then select the display language in [Language / XXX] (XXX indicates the current display language) on the [  ] tab. For details, see page 107 "Default Settings 2 Menu". |

| Problem | Solutions |
|---|---|
| No images from USB devices. | • Make sure the USB memory device is connected correctly.<br>• Make sure the connected USB memory device is compatible with the projector.<br>• Make sure there are JPEG or MPEG files saved on the USB memory device.<br>• Make sure the compression format, file size, and other conditions are compatible with the projector. For details, see page 51 "Requirements for Projecting Images from a USB Device". |
| Wired LAN is disabled. | • Check the settings of [Wired LAN Settings] in [Network Settings] under [Network/USB Settings]. For details, see page 112 "Network Settings Menu". |
| Wireless LAN is disabled.<br>(RICOH PJ X3351N/WX3351N/WX4241N only) | • Check the settings of [Wireless LAN Settings] in [Network Settings] under [Network/USB Settings]. For details, see page 112 "Network Settings Menu".<br>• Make sure there is nothing placed between the computer and the projector.<br>• Make sure the operating system of the computer is compatible with QuickProjection. For details, see page 77 "How to Use QuickProjection".<br>• To project images by ad hoc wireless communication, log in to the computer with administrator privileges.<br>• Make sure that the projector is not in standby.<br>• Move the projector and access points closer to each other.<br>• Make sure the access point and projector are close to each other, and move devices that emit radio signals such as microwave ovens further away. |



## Accessing the Online Knowledge Base

If you have any questions about the projector, refer to the knowledge base. Visit our global website listed below, and then access a knowledge base page in your language.

http://www.ricoh.com/support/

You can search the knowledge base by product name or keyword.

# 7. Maintenance

This chapter explains the operating precautions and maintenance for the projector.

## Operating Precautions

### ⚠CAUTION

- The machine's light uses a mercury vapor lamp that becomes high pressure when it is turned on. The lamp has the following characteristics, so be sure to handle it with care after understanding the contents. If the lamp explodes and either you are injured from broken pieces of glass, think you have gotten glass particles or mercury vapour in your eyes, or have inhaled glass particles or mercury vapour, contact a doctor immediately.
  - Deterioration or shock can cause the lamp's life span to end or the lamp to explode. If the lamp explodes, it may make a big noise.
  - The time that it takes for the lamp to reach its life span or explode depends on each individual lamp and its operating conditions. It is possible that it might explode the first time it is used.
  - If you use the lamp past its replacement period, the possibility of explosion increases.
  - If the lamp explodes, broken glass pieces may be scattered around the inside of the machine and ejected from the vent or other opening.
  - If the lamp explodes, a very small amount of mercury vapor in the lamp tube and broken glass pieces may be ejected from the vents or other opening.

Pay attention to the following points when using the projector:

- What to do if a lamp has exploded
  - If the lamp explodes, remove the power cord from the projector, leave the room while making sure it is thoroughly ventilated.
  - If the lamp explodes and you think that you have gotten glass particles or mercury vapor in your eyes or have inhaled either, contact a doctor immediately.
  - Clean up the area around the projector completely while being careful not to get injured from any broken glass pieces.
  - Throw away any food that was near the projector.
  - Ask your service representative to replace the lamp and inspect the projector.
- What to do if a battery has leaked
  - If leakage from a battery adheres to your skin, rinse it with water immediately, and then contact a doctor.
  - Wipe off the leakage with tissue paper while being careful not to touch it.

- Soak the tissue paper that you used in water, and then throw it away as burnable trash.

- When you carry the projector by hand, hold it with both hands and keep it in a horizontal position. If you hold the projector with one hand, its covers may come off or you may drop it.
- If moving the projector under conditions including vibration and shock, use both the packing case and included carrying bag. Transporting the projector using the carrying bag only may damage it due to shock or vibration. Further, transporting the projector in a damaged packing case may damage the projector, so use a packing case that is strong enough to protect the projector from shock or vibration.
- Do not apply volatile substances such as insecticide to the projector. Also, do not bring the projector into long-term contact with rubber or vinyl products. Doing so may cause discoloration or the paint to peel.
- The projector is not intended for long-term continuous operation. Further, do not use the projector before removing it completely from the packing case. If a malfunction occurs when using the projector under these conditions, a fee is charged for repair even if the warranty is still in effect.
- Do not use locations that may be hot, such as near a heater. Doing so may cause the projector to malfunction or reduce the service life.
- Avoid locations that may become smoky. Particulates may adhere to the optical parts, reducing the service life and causing the image to darken.
- Using the projector close to a television or radio may adversely affect the images and sound.
- Do not expose the projector to salt air or corrosive gas. Also, do not place the projector in a laboratory or other location where a chemical reaction might occur. Doing so may cause the projector to malfunction.
- Moving the projector from a low-temperature location to a high-temperature location may cause water droplets to form on the projector lens and parts due to condensation. Continued use under such conditions may cause malfunction, so do not use the projector until the water droplets have evaporated.
- The air is thin at high elevations, so the cooling efficiency of the projector is reduced. Select [On] in [High Altitude Mode] before using.
- Do not use the projector tilted to either side (20° or greater). Doing so may cause malfunction or reduce the service life.

# Cleaning the Projector

## ⚠WARNING

- Do not remove any covers or screws that are not mentioned in this manual. There are high voltage components inside the machine that may cause electric shock. Contact your service representative if any of the machine's internal components require maintenance, adjustment, or repair.
- Do not disassemble or modify the machine. Doing so may cause injury or malfunction.
- Do not attempt to clean or replace parts for a machine that is installed in a high location on a wall or ceiling. Doing so may cause it to fall down, resulting in an injury.
- Do not open the lamp cover of a machine that is installed on a wall or ceiling. Doing so may cause the lamp cover to fall down. If the lamp is broken, pieces of glass may fall and cause an injury.
- Contact your sales or service representative to clean or replace parts for a machine that is installed on a wall or ceiling.

## ⚠CAUTION

- When performing maintenance on the machine, always disconnect the power cord from the wall outlet.



## Cleaning the Lens

When cleaning the lens, make sure to do the following:

- Use a commercially available blower or cloth for cleaning glass, cleaning paper, plastic lens cleaner, etc.
- The lens surface scratches easily, so do not rub or tap it with a hard object.

## Cleaning the Projector

When cleaning the projector, make sure to do the following:

- Disconnect the power plug before cleaning.
- Gently wipe any dirt from the projector using a soft cloth. Using a damp cloth may cause water to seep inside the projector and cause electric shock or malfunction.
- Do not use benzene or paint thinners. Doing so may cause the projector to warp, discolor, or the paint to peel. Further, do not use cleaning cloths that contain chemicals.

# Replacing the Lamp

## ⚠WARNING

- Before replacing the lamp, turn off the power and wait at least one hour to allow the machine to cool completely. If it is not completely cool, you may burn or injure yourself due to the inside of the machine and lamp unit being hot. If you replace the lamp without unplugging the power cord from the power outlet, electric shock or explosion may occur.
- Be careful when handling the used lamp so that it does not break. If it breaks, it may cause injury.
- Do not attempt to clean or replace parts for a machine that is installed in a high location on a wall or ceiling. Doing so may cause it to fall down, resulting in an injury.
- Do not open the lamp cover of a machine that is installed on a wall or ceiling. Doing so may cause the lamp cover to fall down. If the lamp is broken, pieces of glass may fall and cause an injury.
- Contact your sales or service representative to clean or replace parts for a machine that I installed on a wall or ceiling.

## ⚠CAUTION

- Be sure to always use a dedicated replacement lamp that is new when replacing the lamp. If you use a lamp that is not dedicated, it may result in an explosion and injury.
- The machine's light uses a mercury vapor lamp that becomes high pressure when it is turned on. The lamp has the following characteristics, so be sure to handle it with care after understanding the contents. If the lamp explodes and you are either injured from broken pieces of glass, think you have gotten glass particles or mercury vapour in your eyes, or have inhaled glass particles or mercury vapour, contact a doctor immediately.
    - Deterioration or shock can cause the lamp's life span to end or the lamp to explode. If the lamp explodes, it may make a big noise.
    - The time that it takes for the lamp to reach its life span or explode depends on each individual lamp and its operating conditions. It is possible that it might explode the first time it is used.
    - If you use the lamp past its replacement period, the possibility of explosion increases.
    - If the lamp explodes, broken glass pieces may be scattered around the inside of the machine and ejected from the vent or other opening.
    - If the lamp explodes, a very small amount of mercury vapor in the lamp tube and broken glass pieces may be ejected from the vents or other opening.

**Important**

- **The lamp is a glass product. Do not touch the glass surface with bare hands, hit it forcefully, or damage it. For details about what to do if a lamp has exploded, see page 143 "Operating Precautions".**
- **This projector's lamp contains trace amounts of environmentally harmful inorganic mercury. Be careful not to break used lamps, and dispose of them in accordance with local regulations or contact your sales representative or service representative.**

When the lamp is due for replacement, the message "The lamp is reaching the end of its life. Please change it." is displayed. Change the lamp as instructed.

When [Lamp Power] in [Energy Saving Settings] is specified as [Maximum], replace the lamp after approximately 3,500 hours. When the setting is [Low], replace it after approximately 5,000 hours. However, depending on the characteristics of the lamp and how the lamp is used, the image may become dim or the lamp may go out before the message is displayed. We recommend preparing a spare lamp, just in case.

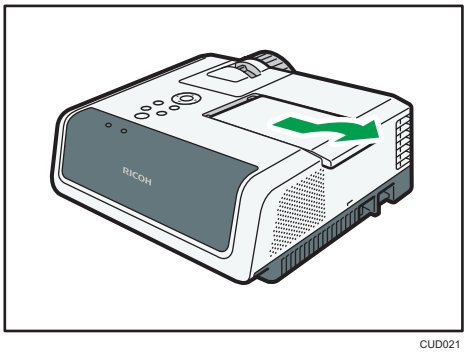
Do not repeatedly turn off the projector immediately after the lamp is lit, or turn on the projector immediately after turning it off. Doing so may damage the lamp or shorten its life.

Furthermore, if the lamp is used for an extended period of time, the image may darken or the lamp may burn out. If this happens, replace the lamp with a new one.

You need a Phillips screwdriver to replace the lamp.

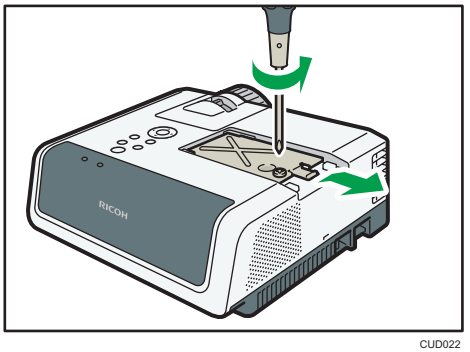


1. **Slide the outer lamp cover to the right to remove it.**



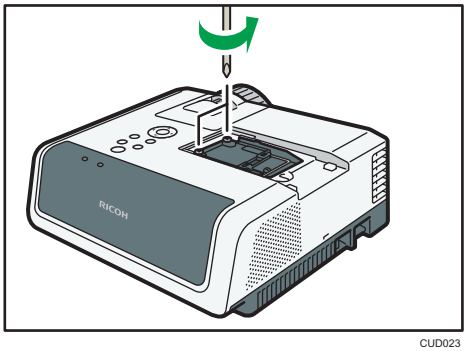

CUD021

2. Loosen the screw on the right side of the inner lamp cover, and then remove the inner lamp cover.



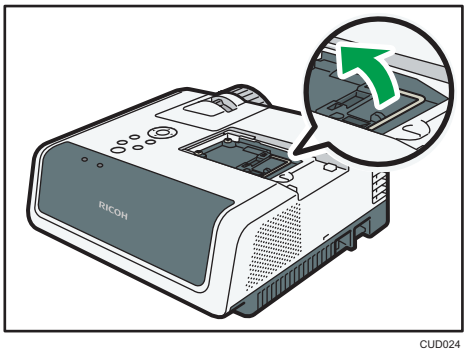

CUD022

3. Loosen the two screws on the left side of the lamp unit.



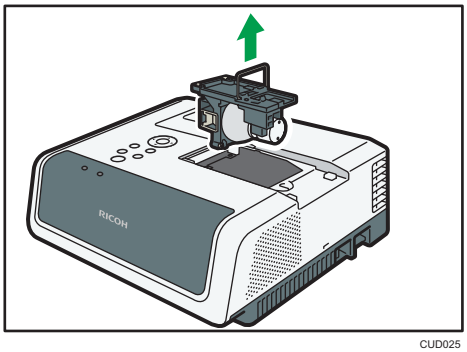

CUD023

4. Raise the metal handle.



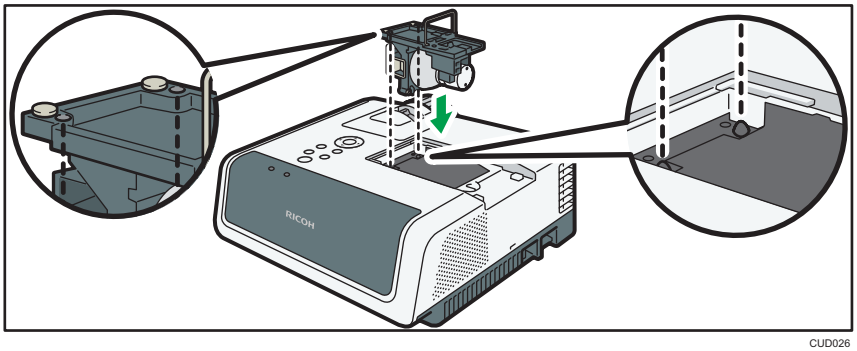

CUD024

5. **Hold the handle, and then pull the lamp unit out of the projector.**




CUD025

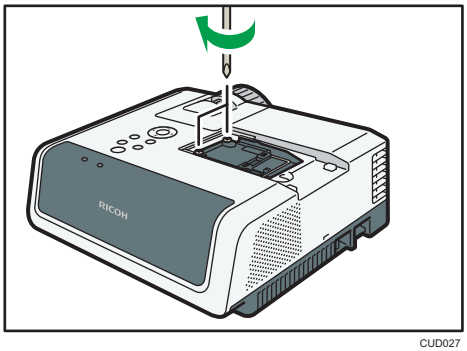
6. **Insert a new lamp unit.**




CUD026

Make sure that the small projections inside the projector are inserted into the holes of the lamp unit properly.

7. **Tighten the two screws on the left side of the lamp unit.**

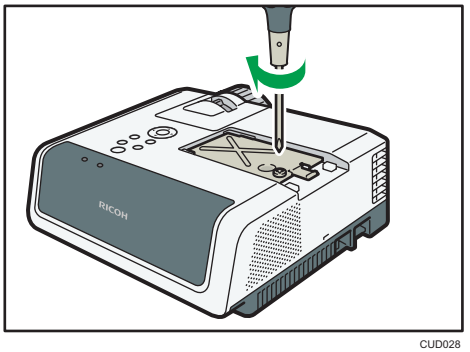



CUD027

8. **Attach the inner lamp cover by sliding it from the right.**

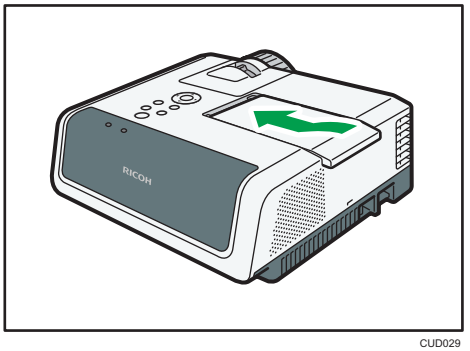
Make sure the inner lamp cover is inserted into the slits inside the projector.

9. **Tighten the screw on the right side of the inner lamp cover.**




CUD028

10. **Put the outer lamp cover on the projector, and then slide it to the left.**




CUD029

Make sure the projections on the left edge of the outer lamp cover are inserted into the holes on the projector properly.

Correctly install the outer lamp cover. Incorrect installation may prevent the lamp or projector from turning on.

11. **Reset the lamp time.**

For the reset method, see the manual provided with the lamp.

**Note**

- The lamp's service life can be verified using [Lamp Time] in [Display Status].
- The lamp may stop working before it reaches its approximate service life or before the replacement message is displayed.

# Managing the Projector Using Projector Management Utility

Projector Management Utility conforms to the PJLink class 1 standards, and is compatible with all class 1 commands.

A maximum of 100 projectors connected to the network can be managed using one computer.

Projector Management Utility operating environment is described below.

- Supported operating system
  - Windows Vista Ultimate, Business, Home Premium, Home Basic, SP2 or later (32-bit and 64-bit versions)
  - Windows 7 Home Premium, Professional, Ultimate, Enterprise, SP1 (32-bit and 64-bit versions)
  - Windows 8, Pro, Enterprise (32-bit and 64-bit versions)
  - Windows 8.1, Pro, Enterprise (32-bit and 64-bit versions)
  - Windows Server 2008 Standard SP2 or later (32-bit and 64-bit versions)
  - Windows Server 2008 R2 Standard SP1 or later (64-bit version)

**Note**

- This software is to control and monitor projectors manufactured by our company.
- See the Projector Management Utility Help for how to use Projector Management Utility.



## Installing Projector Management Utility

**Important**

- **Log in to the computer with administrator privileges to install or uninstall utilities.**

Projector Management Utility is included on the supplied CD-ROM.

1. **Close all applications.**
2. **Insert the CD-ROM in the CD-ROM drive of your computer.**

   The launcher screen appears.
3. **Specify a language and model name, and then click [Select].**
4. **Click [Projector Management Utility].**
5. **Install the application by following the on-screen instruction.**
6. **When the installation is complete, exit the installer.**

   A shortcut icon is created on the desktop.

Note

- To uninstall Projector Management Utility, use the program delete function in [Control Panel] to delete "RICOH Projector Management Utility".

## Settings Required to Use Projector Management Utility

Specify the following settings to control the projector using Projector Management Utility:

- Connect the projector to a network using [Network Settings]
- [Projector Name] in [Network Settings]
- [PJLink] items in [Network Application Settings]

For details, see page 112 "Network Settings Menu" and page 121 "Network Application Settings Menu".

Note

- [PJLink Password] is not specified by factory defaults. It is recommended to register a password as soon as possible. If you forget the password, register a new password. The new password is valid.



## Starting Projector Management Utility

The projector must be registered in advance. For details, see the Projector Management Utility Help.

Projector Management Utility acquires the projector registration information from the configuration file, when it is launched.

Important

- **To use Projector Management Utility, log on using administrator privileges.**

1. **Double-click the "Projector Management Utility" icon on the desktop.**

   The information for the projectors detected by the application is displayed.

   The following information can be obtained:

   - Projector status (power on and off, input signal, Av mute on and off, lamp status, error status)
   - Projector information (projector name, manufacturer, IP address)

   The functions that can be operated from Projector Management Utility are power on and off, input signal switching, and mute.

Note

- Depending on the setting in [NW Settings on Standby], the projector does not respond even if the projector is in standby mode. Press the [Power] button, or change the setting in [NW Settings on Standby] to [Wired LAN] or [Wired/Wireless LAN] (RICOH PJ X3351N/WX3351N/

WX4241N only) so that the projector can be turned on from standby mode via a wired LAN or wireless LAN.

- If a communications error prevents the projector from being detected, "?" is displayed. If the connection failed due to an incorrect password or other reason, "×" is displayed.
- Mute function is not applied if it is not supported by the projector. The projector supports "Video & Audio" mute. "Video" mute and "Audio" mute are not supported.
- An input signal cannot be switched if you select the input signal that is not supported by the projector. The following table describes the supported input signal by the projector and the corresponding input name displayed in Projector Management Utility:

| Projector input signal | PJLink input name |
|---|---|
| Computer 1 | RGB1 |
| Y/Pb/Pr | RGB2 |
| Computer 2 | RGB3 |
| HDMI | DIGITAL1 |
| Video | VIDEO1 |
| Network PC | NETWORK1 |
| Server | NETWORK2 |
| Miracast (RICOH PJ X3351N/WX3351N/ WX4241N only) | NETWORK3 |
| USB Memory | STORAGE1 |

# Managing the Projector Using Web Image Monitor

Using Web Image Monitor, you can check the projector status and change settings.

To use this function, specify the following settings:

- Connect the projector to a network using [Network Settings]
- Select [Enable] in [Web Image Monitor] under [Network Application Settings]

  To enable this setting after you change it, you must restart Web Image Monitor.

For details, see page 112 "Network Settings Menu" and page 121 "Network Application Settings Menu".

The following web browsers are recommended for Web Image Monitor:

- Windows:

  Internet Explorer 8.0 or higher
- Mac OS

  Safari 7.0 or higher

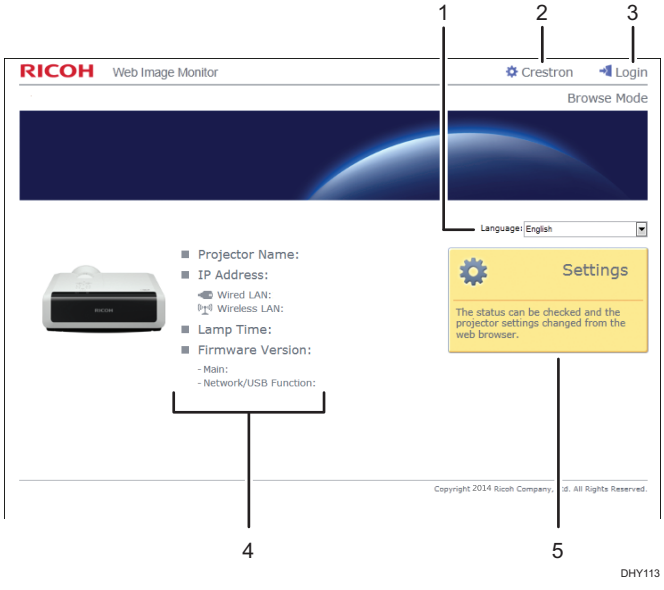
**Note**

- Display and operation problems can occur if you are using a non-recommended web browser.
- You must enable JavaScript and cookies on your web browser to use Web Image Monitor.
- If you use Internet Explorer, you must enable native XMLHTTP support to use Web Image Monitor.
- You can access Web Image Monitor more quickly by registering the projector's URL as a bookmark.
- Depending on the setting in [NW Settings on Standby], the projector does not respond even if the projector is in standby mode. Press the Power button, or change the setting in [NW Settings on Standby] to [Wired LAN] or [Wired/Wireless LAN] (RICOH PJ X3351N/WX3351N/WX4241N only) so that the projector can be turned on from standby mode via a wired LAN or wireless LAN.

## Displaying Web Image Monitor

1. **Start your web browser.**
2. **Enter "http://(projector's IP address)/" in your web browser's URL bar.**

   Top Page of Web Image Monitor appears.




1. **Language**

   Select the display language for Web Image Monitor.

   Available languages are as follows:

   English, French, German, Spanish, Italian, Dutch, Japanese, Simplified Chinese.

2. **Crestron**

   Displays Crestron WebUI. For details about Crestron WebUI, see page 157 "Controlling and Monitoring the Projector Using Crestron RoomView".

   This item appears when [Crestron RoomView] in [Network Application Settings] is set to [Enable].

3. **Login/Logout**

   To enter edit mode, click [Login], and then enter the administrator password. To leave edit mode, click [Logout].

   This item appears when [Administrator Authentication] in [Network Application Settings] is set to [On].

4. **Status area**

   You can check the projector name, IP address, lamp time, and firmware version.

5. **Settings**

   Displays the settings screen. On the settings screen, you can specify and check the items in the USB Settings menu, Network Settings menu, and Network Application Settings menu. For details about each setting, see page 110 "USB Settings Menu", page 112 "Network Settings Menu", or page 121 "Network Application Settings Menu".

## About Browse Mode and Edit Mode

When [Administrator Authentication] in [Network Application Settings] is set to [On], there are two modes available with Web Image Monitor: browse mode and edit mode.

**Browse Mode**

This mode requires no user login.

In browse mode, you can check the projector status and settings, but you cannot change the projector settings.

**Edit Mode**

The administrator password is required for the user to log in to the edit mode.

In edit mode, you can check the projector status and settings, and also change the projector settings.

**Note**

- When [Administrator Authentication] in [Network Application Settings] is set to [Off], you can use Web Image Monitor in edit mode without entering a password.

## Login to Edit Mode

1. **On Top Page, click [Login].**
2. **Enter the administrator password, and then click [Login].**

   Enter the password that is specified in [Administrator Password] under [Network Application Settings].

**Note**

- Depending on the configuration of your web browser, the password might be saved. If you do not want to save the password, configure your web browser's settings so that this information is not saved.

# Controlling and Monitoring the Projector Using Crestron RoomView

The projector supports Crestron RoomView. Crestron RoomView is a system developed by Crestron Electronics for controlling and monitoring multiple devices on a network. For more information, see the Crestron Electronics website.

**What you can do with Crestron RoomView**

- Controlling and monitoring the projector using a web browser

  Using Crestron WebUI, you can control and monitor the projector from your computer. For details, see page 157 "Displaying Crestron WebUI" and page 158 "Using Crestron WebUI".

- Controlling and monitoring the projector using Crestron software

  Using the Crestron RoomView Express/Crestron RoomView Server Edition, software supplied by Crestron Electronics, you can monitor the projector, communicate with the help desk, and send emergency messages. For details, see the Crestron Electronics website.

To use this function, specify the following settings:

- Connect the projector to a network using [Network Settings]
- Select [Enable] in [Crestron RoomView] under [Network Application Settings]
- Specify other items in [Crestron RoomView] as required

For details, see page 112 "Network Settings Menu" and page 121.

**Note**

- Depending on the setting in [NW Settings on Standby], the projector does not respond even if the projector is in standby mode. Press the Power button, or change the setting in [NW Settings on Standby] to [Wired LAN] or [Wired/Wireless LAN] (RICOH PJ X3351N/WX3351N/WX4241N only) so that the projector can be turned on from standby mode via a wired LAN or wireless LAN.

## Displaying Crestron WebUI

**Important**

- **To use Crestron WebUI, Adobe Flash® Player must be installed on your computer.**

1. **Start your Web browser.**
2. **Enter "http://(projector's IP address)/" in your Web browser's URL bar.**

   The top screen of Web Image Monitor appears.

3. **Click [Crestron] at the top right on Web Image Monitor.**

   The top screen of Crestron WebUI appears.




**Note**

- If [Crestron WebUI User Auth.] under [Network Application Settings] is enabled, a password is required to access Crestron WebUI.

7

## Using Crestron WebUI

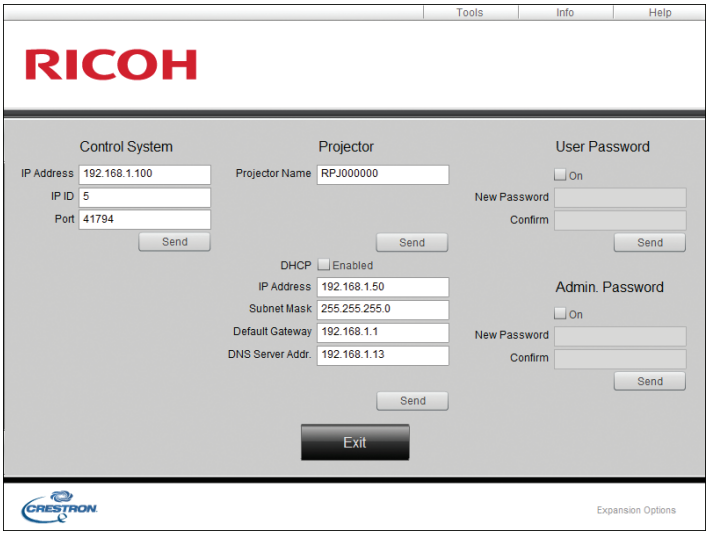
### Top screen

This screen is displayed when you access Crestron WebUI, or click [Exit] on the tools screen or information screen. You can switch the input signal, adjust the image and the volume of the speaker, and turn off the projector on this screen.



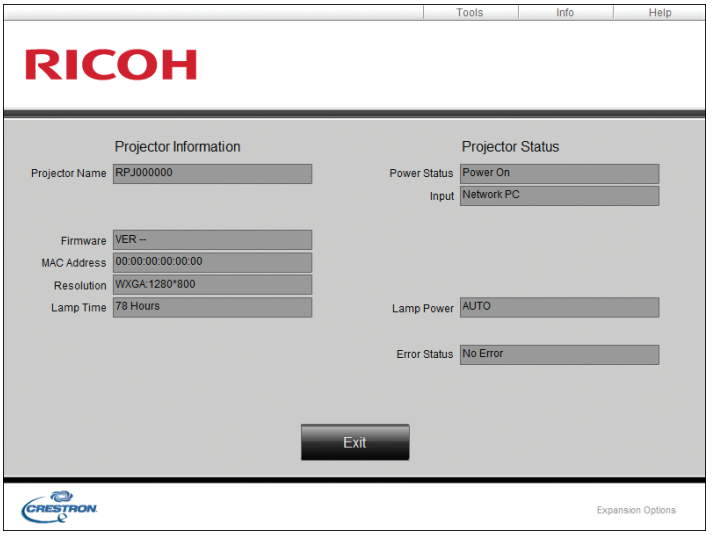

### Tools screen

You can display the tools screen by clicking the [Tools] tab. You can specify the projector's network settings and Crestron RoomView settings on this screen.




### Information screen

You can display the information screen by clicking the [Info] tab. You can check the projector's information, such as the firmware version and lamp status on this screen.




### Help desk window

You can display the help desk window by clicking the [Help] tab. You can send and receive a message to administrators who are using Crestron RoomView Express in this window.




**Note**

- If [Crestron WebUI Admin. Auth.] under [Network Application Settings] is enabled, a password is required to access the tools screen.

# Consumables

- Lamp unit

  RICOH PJ Replacement Lamp Type17

**Note**

- Contact your sales or service representative for information about consumables.

# 8. Appendix

This chapter explains the projector's specifications and compatible signals. This chapter also explains where to inquire about the projector and related services.

## Specifications for the Projector

| Component | Specifications |
|---|---|
| Power consumption | Maximum: 334 W<br>Standard mode: 316 W<br>Eco mode: 209 W |
| Power consumption (Standby mode) | Regular standby mode: 0.3 W<br>Network standby mode (Wired LAN): 1.4 W<br>Network standby mode (Wired/Wireless LAN) (RICOH PJ X3351N/WX3351N/WX4241N only): 1.8 W |
| Weight | Approx. 3.1 kg (6.9 lb.) |
| External dimensions (not including protruding parts) | 297 × 235 × 100 mm (11.7 × 9.3 × 4.0 inches) |
| Operating environment | Temperature: 5 to 35°C (73 to 95°F), Humidity: 30 to 70% |
| Power requirements | • Region A (mainly Europe and Asia)<br>220–240 V, 1.7 A, 50/60Hz<br>• Region B (mainly North America)<br>120 V, 3.1 A, 60Hz |
| Display element | • Display method<br>Single-chip DLP®<br>• Panel size<br>RICOH PJ X3351N/X4241N: 0.55 inches<br>RICOH PJ WX3351N/WX4241N: 0.65 inches<br>• Pixels<br>RICOH PJ X3351N/X4241N: 786,432 pixels (1,024 H × 768 V)<br>RICOH PJ WX3351N/WX4241N: 1,024,000 pixels (1,280 H × 800 V) |

| Component | Specifications |
|---|---|
| Projection method | RICOH PJ X3351N/WX3351N: 1.5x zoom lens<br>RICOH PJ X4241N/WX4241N: Short-focus lens |
| Lamp | 250 W high-pressure mercury lamp |
| Projection screen size | RICOH PJ X3351N: 30 to 200 inches<br>RICOH PJ WX3351N: 40 to 240 inches<br>RICOH PJ X4241N: 50 to 120 inches<br>RICOH PJ WX4241N: 60 to 140 inches |
| Projection distance | RICOH PJ X3351N: 0.68 to 7.20 m (2.22 to 23.61 feet)<br>RICOH PJ WX3351N: 0.77 to 7.33 m (2.53 to 24.06 feet)<br>RICOH PJ X4241N: 0.59 to 1.49 m (1.49 to 4.88 feet)<br>RICOH PJ WX4241N: 0.61 to 1.48 m (2.00 to 4.85 feet) |
| Speaker | 10 W (Mono) |

| Component | Specifications |
|---|---|
| Connection ports | • Computer1 In port<br>Mini D-SUB15 × 1<br>• Computer2 In/Monitor Out port<br>Mini D-SUB15 × 1<br>• HDMI port (HDCP compliant)*<br>HDMI × 1<br>• Video In port<br>RCA_1pin × 1<br>• Audio In port<br>Mini Jack × 1<br>• Audio Out port<br>Mini Jack × 1<br>• Control port<br>USB-TYPE-miniB × 1<br>• USB port<br>TYPE-A × 1<br>USB 2.0 High-speed<br>Output voltage: DC 5 V<br>Supply current: 500 mA<br>• LAN port<br>RJ-45<br>10BASE-T/100BASE-TX/1000BASE-T |
| Wireless LAN | RICOH PJ X3351N/WX3351N/WX4241N only<br>• Region A (mainly Europe and Asia)<br>Based on IEEE 802.11b/g/n<br>• Region B (mainly North America)<br>Based on IEEE 802.11a/b/g/n |

* HDCP (High-bandwidth Digital Content Protection) is a copyright protection method to encrypt digital signals across the DVI/HDMI interface and prevent unauthorized copying. The HDCP specification was developed and is licensed by Digital Content Protection, LLC. The HDMI port on this projector is HDCP compliant and can project digital video content protected by HDCP. Updates to the HDCP specification may void this compliance and prevent access to protected data. If this occurs, it is not caused by the projector.

# List of Compatible Signals

Set the computer and AV equipment output signals so that they match the input signals compatible with the projector.

If resolutions or signal frequencies that are not compatible with the projector are input, the image may flicker or become blurred. Further, the image may not be displayed.

**Note**

- Images with a resolution greater than the following are compressed when displayed, so some of the information may be lost or the image may deteriorate.
  - RICOH PJ X3351N/X4241N: 1024 × 768 resolution
  - RICOH PJ WX3351N/WX4241N: 1280 × 800 resolution

## Video Input

**Compatible mode**

NTSC, PAL, SECAM, PAL-M, PAL-N, PAL60, NTSC4.43

## Y/Pb/Pr Input

**Compatible mode**

480i (525i), 480p (525p), 576i (625i), 576p (625p), 720/50p, 720/60p, 1080/50i, 1080/60i, 1080/50p, 1080/60p

## Computer Input

| Mode | Resolution | | Frequency | | |
|---|---|---|---|---|---|
| | Horizontal (pixel) | Vertical (pixel) | Vertical (Hz) | Horizontal (kHz) | Clock (MHz) |
| 640 × 350 | 640 | 350 | 85.08 | 37.86 | 31.50 |
| 640 × 400 | 640 | 400 | 85.08 | 37.86 | 31.50 |
| 640 × 480 | 640 | 480 | 59.93 | 31.46 | 25.17 |
| | | | 72.81 | 37.86 | 31.50 |
| | | | 75.00 | 37.50 | 31.50 |
| | | | 85.01 | 43.27 | 36.00 |
| 720 × 400 | 720 | 400 | 85.04 | 37.93 | 35.50 |
| 800 × 600 | 800 | 600 | 56.25 | 35.16 | 36.00 |
| | | | 60.32 | 37.88 | 40.00 |
| | | | 72.19 | 48.08 | 50.00 |
| | | | 75.00 | 46.88 | 49.50 |
| | | | 85.06 | 53.67 | 56.25 |
| 832 × 624 | 832 | 624 | 74.55 | 49.72 | 57.28 |
| 848 × 480 | 848 | 480 | 60.00 | 31.02 | 33.75 |
| 1024 × 768 | 1024 | 768 | 60.00 | 48.36 | 65.00 |
| | | | 70.07 | 56.48 | 75.00 |
| | | | 75.03 | 60.02 | 78.75 |
| | | | 85.00 | 68.68 | 94.50 |
| 1152 × 864 | 1152 | 864 | 75.00 | 67.50 | 108.00 |
| 1152 × 870 | 1152 | 870 | 75.06 | 68.68 | 100.00 |
| 1280 × 720 | 1280 | 720 | 60.00 | 45.00 | 74.25 |
| 1280 × 768 | 1280 | 768 | 59.99 | 47.40 | 68.25 |
| | | | 59.87 | 47.78 | 79.50 |
| | | | 74.89 | 60.29 | 102.25 |
| | | | 84.84 | 68.63 | 117.50 |
| 1280 × 800 | 1280 | 800 | 59.91 | 49.31 | 71.00 |
| | | | 59.81 | 49.70 | 83.50 |
| | | | 74.93 | 62.79 | 106.50 |
| | | | 84.88 | 71.55 | 122.50 |
| 1280 × 960 | 1280 | 960 | 60.00 | 60.00 | 108.00 |
| | | | 85.00 | 85.94 | 148.50 |
| 1280 × 1024 | 1280 | 1024 | 60.02 | 63.98 | 108.00 |
| | | | 75.02 | 79.98 | 135.00 |
| | | | 85.02 | 91.15 | 157.50 |
| 1360 × 768 | 1360 | 768 | 60.02 | 47.71 | 85.50 |
| 1366 × 768 | 1366 | 768 | 60.00 | 48.00 | 72.00 |
| | | | 59.79 | 47.71 | 85.50 |
| 1400 × 1050 | 1400 | 1050 | 59.95 | 64.74 | 101.00 |
| | | | 59.98 | 65.32 | 121.75 |
| | | | 74.87 | 82.28 | 156.00 |
| 1440 × 900 | 1440 | 900 | 59.90 | 55.47 | 88.75 |
| | | | 59.89 | 55.93 | 106.50 |
| | | | 74.98 | 70.64 | 136.75 |
| | | | 84.84 | 80.43 | 157.00 |
| 1600 × 900 | 1600 | 900 | 60.00 | 60.00 | 108.00 |
| 1600 × 1200 | 1600 | 1200 | 60.00 | 75.00 | 162.00 |
| 1680 × 1050 | 1680 | 1050 | 59.88 | 64.67 | 119.00 |
| | | | 59.95 | 65.29 | 146.25 |

## HDMI Input

| Mode | Resolution | | Frequency | | |
|---|---|---|---|---|---|
| | Horizontal (pixel) | Vertical (pixel) | Vertical (Hz) | Horizontal (kHz) | Clock (MHz) |
| 480i | 720 | 242.5 | 59.940 | 15.734 | 13.500 |
| 576i | 720 | 288 | 50.000 | 15.625 | 13.500 |
| 480p | 720 | 483 | 59.940 | 31.469 | 27.000 |
| 576p | 720 | 576 | 50.000 | 31.250 | 27.000 |
| 720 / 50p | 1280 | 720 | 50.000 | 37.500 | 74.250 |
| 720 / 60p | 1280 | 720 | 60.000 | 45.000 | 74.250 |
| 1080 / 50i | 1920 | 540 | 50.000 | 28.125 | 74.250 |
| 1080 / 60i | 1920 | 540 | 60.000 | 33.750 | 74.250 |
| 1080 / 24p | 1920 | 1080 | 24.000 | 27.000 | 74.250 |
| 1080 / 30p | 1920 | 1080 | 30.000 | 33.750 | 74.250 |
| 1080 / 50p | 1920 | 1080 | 50.000 | 56.250 | 148.500 |
| 1080 / 60p | 1920 | 1080 | 60.000 | 67.500 | 148.500 |
| 640 × 350 | 640 | 350 | 85.08 | 37.86 | 31.50 |
| 640 × 400 | 640 | 400 | 85.08 | 37.86 | 31.50 |
| 640 × 480 | 640 | 480 | 59.93 | 31.46 | 25.17 |
| | | | 72.81 | 37.86 | 31.50 |
| | | | 75.00 | 37.50 | 31.50 |
| | | | 85.01 | 43.27 | 36.00 |
| 800 × 600 | 800 | 600 | 56.25 | 35.16 | 36.00 |
| | | | 60.32 | 37.88 | 40.00 |
| | | | 72.19 | 48.08 | 50.00 |
| | | | 75.00 | 46.88 | 49.50 |
| | | | 85.06 | 53.67 | 56.25 |
| 832 × 624 | 832 | 624 | 74.55 | 49.72 | 57.28 |
| 848 × 480 | 848 | 480 | 60.00 | 31.02 | 33.75 |
| 1024 × 768 | 1024 | 768 | 60.00 | 48.36 | 65.00 |
| | | | 70.07 | 56.48 | 75.00 |
| | | | 75.03 | 60.02 | 78.75 |
| | | | 85.00 | 68.68 | 94.50 |
| 1152 × 864 | 1152 | 864 | 75.00 | 67.50 | 108.00 |
| 1152 × 780 | 1152 | 780 | 75.06 | 68.68 | 100.00 |
| 1280 × 720 | 1280 | 720 | 60.00 | 45.00 | 74.25 |
| 1280 × 768 | 1280 | 768 | 59.99 | 47.40 | 68.25 |
| | | | 59.87 | 47.78 | 79.50 |
| | | | 74.89 | 60.29 | 102.25 |
| | | | 84.84 | 68.63 | 117.50 |
| 1280 × 800 | 1280 | 800 | 59.91 | 49.31 | 71.00 |
| | | | 59.81 | 49.70 | 83.50 |
| | | | 74.93 | 62.79 | 106.50 |
| | | | 84.88 | 71.55 | 122.50 |
| 1280 × 960 | 1280 | 960 | 60.00 | 60.00 | 108.00 |
| | | | 85.00 | 85.94 | 148.50 |
| 1280 × 1024 | 1280 | 1024 | 60.02 | 63.98 | 108.00 |
| | | | 75.02 | 79.98 | 135.00 |
| | | | 85.02 | 91.15 | 157.50 |
| 1360 × 768 | 1360 | 768 | 60.02 | 47.71 | 85.50 |
| 1366 × 768 | 1366 | 768 | 60.00 | 48.00 | 72.00 |
| | | | 59.79 | 47.71 | 85.50 |
| 1400 × 1050 | 1400 | 1050 | 59.95 | 64.74 | 101.00 |
| | | | 59.98 | 65.32 | 121.75 |
| | | | 74.87 | 82.28 | 156.00 |
| 1440 × 900 | 1440 | 900 | 59.90 | 55.47 | 88.75 |
| | | | 59.89 | 55.93 | 106.50 |
| | | | 74.98 | 70.64 | 136.75 |
| | | | 84.84 | 80.43 | 157.00 |
| 1600 × 900 | 1600 | 900 | 60.00 | 60.00 | 108.00 |
| 1600 × 1200 | 1600 | 1200 | 60.00 | 75.00 | 162.00 |
| 1680 × 1050 | 1680 | 1050 | 59.88 | 64.67 | 119.00 |
| | | | 59.95 | 65.29 | 146.25 |

## 3D Format

○: Supported

×: Not Supported

### Computer input

| Mode | Frequency | | 3D format | | |
|---|---|---|---|---|---|
| | Vertical (Hz) | Clock (MHz) | Frame Sequential | Side by Side | Top and Bottom |
| 640 × 480 | 59.93 | 25.17 | ○ | ○ | ○ |
| 800 × 600 | 60.32 | 40.00 | ○ | ○ | ○ |
| 1024 × 768 | 60.00 | 65.00 | ○ | ○ | ○ |
| 1280 × 960 | 60.00 | 108.00 | ○ | ○ | ○ |
| 1280 × 1024 | 60.02 | 108.00 | ○ | ○ | ○ |
| 1360 × 768 | 60.02 | 85.50 | ○ | ○ | ○ |
| 1366 × 768 | 60.00 | 72.00 | ○ | ○ | ○ |
| | 59.79 | 85.50 | ○ | ○ | ○ |
| 1440 × 900 | 59.90 | 88.75 | ○ | ○ | ○ |
| | 59.89 | 106.50 | ○ | ○ | ○ |
| 1600 × 900 | 60.00 | 108.00 | ○ | ○ | ○ |
| 1600 × 1200 | 60.00 | 162.00 | ○ | ○ | ○ |
| 1680 × 1050 | 59.88 | 119.00 | ○ | ○ | ○ |
| | 59.95 | 146.25 | ○ | ○ | ○ |

### Y/Pb/Pr input

| Mode | 3D format | | |
|---|---|---|---|
| | Frame Sequential | Side by Side | Top and Bottom |
| 480i | ○ | ○ | ○ |
| 576i | ○ | ○ | ○ |
| 480p | × | ○ | ○ |
| 576p | × | ○ | ○ |
| 720 / 60p | × | ○ | ○ |
| 1080 / 60i | × | ○ | ○ |
| 1080 / 60p | × | ○ | ○ |

### Video input

| Mode | 3D format | | |
|---|---|---|---|
| | Frame Sequential | Side by Side | Top and Bottom |
| NTSC | ○ | × | × |
| PAL | ○ | × | × |

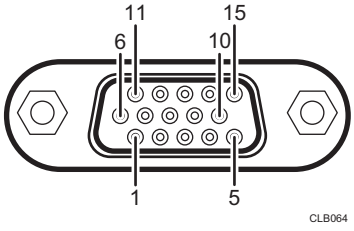
## HDMI input

| Mode | Frequency | | 3D format | | | |
|---|---|---|---|---|---|---|
| | Vertical (Hz) | Clock (MHz) | Frame Sequential | Side by Side | Top and Bottom | Frame Packing |
| 640 × 480 | 59.93 | 25.17 | ○ | ○ | ○ | × |
| 800 × 600 | 60.32 | 40.00 | ○ | ○ | ○ | × |
| 1024 × 768 | 60.00 | 65.00 | ○ | ○ | ○ | × |
| 1280 × 960 | 60.00 | 108.00 | ○ | ○ | ○ | × |
| 1280 × 1024 | 60.02 | 108.00 | ○ | ○ | ○ | × |
| 1360 × 768 | 60.02 | 85.50 | ○ | ○ | ○ | × |
| 1366 × 768 | 60.00 | 72.00 | ○ | ○ | ○ | × |
| | 59.79 | 85.50 | ○ | ○ | ○ | × |
| 1440 × 900 | 59.90 | 88.75 | ○ | ○ | ○ | × |
| | 59.89 | 106.50 | ○ | ○ | ○ | × |
| 1600 × 900 | 60.00 | 108.00 | ○ | ○ | ○ | × |
| 1600 × 1200 | 60.00 | 162.00 | ○ | ○ | ○ | × |
| 1680 × 1050 | 59.88 | 119.00 | ○ | ○ | ○ | × |
| | 59.95 | 146.25 | ○ | ○ | ○ | × |
| 480i | 59.940 | 13.500 | ○ | ○ | ○ | × |
| 576i | 50.000 | 13.500 | ○ | ○ | ○ | × |
| 480p | 59.940 | 27.000 | × | ○ | ○ | × |
| 576p | 50.000 | 27.000 | × | ○ | ○ | × |
| 720 / 60p | 60.000 | 74.250 | × | ○ | ○ | × |
| 1080 / 60i | 60.000 | 74.250 | × | ○ | ○ | × |
| 1080 / 60p | 60.000 | 148.500 | × | ○ | ○ | × |
| 720 / 50p (Frame Packing) | 50.000 | 148.500 | × | × | × | ○ |
| 720 / 60p (Frame Packing) | 59.940/60.000 | 148.350/148.500 | × | × | × | ○ |
| 1080 / 24p (Frame Packing) | 23.976/24.000 | 148.350/148.500 | × | × | × | ○ |
| 1080 / 50i (Side by Side) | 50.000 | 74.250 | × | ○ | × | × |
| 1080 / 60i (Side by Side) | 59.940/60.000 | 74.176/74.250 | × | ○ | × | × |
| 720 / 50p (Top and Bottom) | 50.000 | 74.250 | × | × | ○ | × |
| 720 / 60p (Top and Bottom) | 59.940/60.000 | 74.176/74.250 | × | × | ○ | × |
| 1080 / 24p (Top and Bottom) | 23.976/24.000 | 74.176/74.250 | × | × | ○ | × |

# Specifications for Ports

## Computer1 In Port and Computer2 In/Monitor Out Port

### Pin assignment




| Pin No. | Pin description | |
|---|---|---|
| | During RGB input | During Y/Pb/Pr input (Computer1 In port only) |
| 1 | Video signal (R) | Color difference signal (Pr) |
| 2 | Video signal (G) | Luminance signal (Y) |
| 3 | Video signal (B) | Color difference signal (Pb) |
| 4 | N.C | - |
| 5 | GND | - |
| 6 | GND (R) | GND (Pr) |
| 7 | GND (G) | GND (Y) |
| 8 | GND (B) | GND (Pb) |
| 9 | N.C | - |
| 10 | GND | - |
| 11 | N.C | - |
| 12 | $I^2C$ Data | - |
| 13 | Horizontal sync signal | - |
| 14 | Vertical sync signal | - |

| Pin No. | Pin description | |
|---|---|---|
| | During RGB input | During Y/Pb/Pr input (Computer1 In port only) |
| 15 | $I^2C$ CLOCK | - |

**Input Signal**

- RGB input

  RGB signals: 0.7V (p-p), 75 Ω

  Horizontal sync signal: TTL level (Pos/neg polarity)

  Vertical sync signal: TTL level (Pos/neg polarity)

- Y/Pb/Pr input (Computer1 In port only)

  Y signal: 1.0V (p-p), 75 Ω

  Pb/Pr signals: 0.7V (p-p), 75 Ω

## Control Port

**Interface format**

| | |
|---|---|
| Communication method | RS-232C, 115,200bps, No Parity, Data Length: 8 bits; Stop Bit Length: 1bit |
| Communication format | #(23h)' + Command + CR (0Dh)<br>Only 1 command valid per communication.<br>For the available commands, see "Main commands". |
| Data format | For input commands, only ASCII-compliant all-uppercase alphanumeric characters supported. |
| Replies | • Acknowledge (Aborted)<br>'=(3Dh)' + Command(3byte) + ':(3Ah)' + 'E(45h)' + 'R(52h)' + '0(30h)' + CR(0Dh)<br>• No acknowledge<br>'=(3Dh)' + 'E(45h)' + 'R(52h)' + '0(30h)' + CR(0Dh)<br>For details of Acknowledge (Normally ended), see "Main commands". |

### Main commands

| Item | Command | Acknowledge (Normally ended) * |
|---|---|---|
| Power on | PON | =PON:SC0 |
| Power off | POF | =POF:SC0 |
| Guidance display on | ICN:1 | =ICN:1 |
| Guidance display off | ICN:0 | =ICN:0 |
| Auto setting (RGB input) | PAT | =PAT:SC0 |
| Status display on | DON | =DON:SC0 |
| Status display off | DOF | =DOF:SC0 |
| Computer1 input | INP:1 | =INP:1 |
| HDMI input | INP:5 | =INP:5 |
| Network PC input | INP:12 | =INP:12 |

* CR is added to the end of "Acknowledge (Normally ended)".

**Note**

- The control port is for service representatives or administrators of the projector.
- A USB driver must be installed to control the projector using the control port. For details, contact your service representative.

# Information

## Copyrights

This projector uses open source and/or third party software. To check the information about software copyrights, see the documents in the "OSS" folder on the supplied CD-ROM.

You can also view and download the source code from:

http://www.support-download.com/bb/html/dr_ut_e/oss/index.htm

## Updating the Firmware

You can download the latest firmware from our website. There are two types of firmware; the RICOH PJ X3351N/X4241N firmware and the RICOH PJ WX3351N/WX4241N firmware. Use the firmware that is supported by your projector. For details about how to update the firmware, see the manual downloaded with the firmware.

**Note**

- You can check the current firmware version on the menu screens of the projector.
  - Main FW Version: Display Status menu
  - Network/USB Func. Firmware Version: Network/USB Settings menu ⇒ Network Settings or USB Settings⇒ Display Status

## Where to Inquire

Contact your sales or service representative for further information about topics covered in this manual or to inquire about topics not covered in this manual.

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